



***Feasibility and Plan of Operation Report
For a
Hazardous Waste Storage Facility***

Volume I

March 2006

Submitted by:

***Badger Disposal of WI., Inc.
Milwaukee, Wisconsin***

WID 988 580 056

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March 17, 2006

Ms. Sandra Miller, CHMM
Waste Management Specialist
State of Wisconsin Department of Natural Resources
2300 N. Martin Luther King Jr. Drive
P.O. Box 12436
Milwaukee, WI 53212-0436

RE: Feasibility and Plan of Operation Report
Badger Disposal of WI., Inc.
5611 West Hemlock Street, Milwaukee, WI
EPA DI# WID988580056 Hazardous Waste License: Container Storage #6026

Dear Ms. Miller,

Badger Disposal of WI., Inc. operates a licensed Hazardous Waste Storage Facility at 5611 West Hemlock Street, Milwaukee, WI. Badger Disposal was issued the initial Hazardous waste operating license on December 16, 1996. The license was issued for a 10-year effective period, which ends on December 16, 2006. Badger Disposal requests that the WIDNR renew this license for an additional 10-year period. Enclosed please find two copies of the revised Feasibility and Plan of Operation Report for the facility and a check in the amount of \$7,800.00 for the review fee.

The Feasibility and Plan of Operation Report describes the units that were part of the original Feasibility and Plan of Operation Report but were not constructed, that Badger Disposal still plans to construct. There have not been any significant changes since the completion of the retrofit to the existing building allowing for the acceptance of ignitable (D001) hazardous waste in 1996.

The plan is organized according to Wisconsin Administrative Code Chapter NR 600 and the WIDNR's Relicensing Review Checklists. The applicable code sections are noted in the Table of Contents and at major section headings. Copies of the checklists are located in Appendix R of this submittal.

If you have any questions regarding this submittal please contact me at 414-760-9175.

Sincerely,
Badger Disposal of WI., Inc.


Henry J. Krier, President

5611 W. Hemlock St. Milwaukee, WI 53223

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NOTE: All site maps, plans, diagrams and reports reflect operations at Badger Disposal of WL, Inc.

1

2

Section 1 INTRODUCTION

Badger Disposal of WI., Inc. operates a solid waste transfer and processing facility and a licensed Hazardous Waste Storage Facility located at 5611 West Hemlock Street, Milwaukee, WI. The name of the facility was previously EOG Disposal Incorporated. The facility name was changed to Badger Disposal of WI., Inc. on April 9, 2003 a Class 1 modification for the name change was submitted to the WIDNR on April 9, 2003. EOG Disposal was issued a hazardous waste operating license on December 16, 1996. This license expires on December 16, 2006. Badger Disposal is requesting that the Wisconsin Department of Natural Resources (WIDNR) renew the license for a 10- year period. As part of the licensing renewal process, Badger Disposal is required to submit a revised Feasibility and Plan of Operation Report. This revised Feasibility and Plan of Operation Report is being submitted to fulfill this requirement.

This revised Feasibility and Plan of Operation Report contains the units that were part of the original Feasibility and Plan of Operation Report but were not constructed, that Badger Disposal of WI., Inc. still plans to construct. When Badger Disposal begins plans to construct these units, the WIDNR will be notified of Badger's specific plans in order for the Department to make a determination on license and/or plan modifications. There have not been any significant changes since the completion of the retrofit to the existing building allowing for the acceptance of ignitable (D001) hazardous waste in 1996.

All references to EOG Disposal Incorporated from the original submittal have been changed to read Badger Disposal of WI., Inc. The text from the original submittal has been edited and organized according to Wisconsin Administrative Code Chapter NR 600 and the DNR's Relicensing Review Checklists. The applicable code sections are noted in the Table of Contents and at major section headings. This plan includes the following sections:

- Section 2 – Treatment, Storage & Disposal Facility Standards
- Section 3 - Feasibility and Plan of Operation Report
- Section 4 - Container Standards
- Section 5 – Tank System Standards
- Section 6 - Plan Review and Licensing Standards

Supporting documentation, reports and drawings are provided in the appendices. All maps, sheets and text reflect operations at Badger Disposal rather than EOG Environmental.

Any questions regarding this document can be referred to one of the following individuals:

Henry J. Krier
President
Badger Disposal of WI., Inc.
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Milwaukee, WI 53223
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Fax: 414-760-9189
Email: henry@badgerdisposal.com

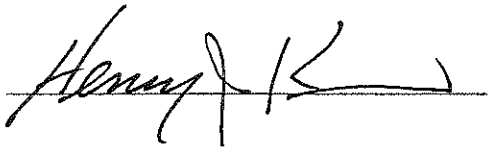
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Certification of Accuracy and Completeness

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Henry J. Krier

Title: President

Signature: 

Date: 3-17-06

Section 2
STORAGE, TREATMENT AND DISPOSAL FACILITY GENERAL STANDARDS
[Chapter NR 630]

2.1 Exemptions NR 630.04

Badger Disposal is a licensed hazardous and solid waste storage facility which provides hazardous waste services and solid waste services to generators of solid and hazardous waste. Badger Disposal has operated the facility since September 1, 1990. Badger currently provides services for clients which include a variety of commercial, institutional, governmental and industrial companies nationwide that do not generate bulk quantities of waste. The primary function of this facility is the bulking and transfer of hazardous and non hazardous waste in order to gain access to secondary markets which include recycling and fuel blending.

Fuel blending operations such as those conducted at Badger Disposal's facility are deemed exempt recycling operations, so long as the facility applies for a written exemption under Wis. Admin. Code Chapter NR 625 and meets the requirements contained therein.

On July 3, 1996, Badger Disposal submitted a hazardous waste fuel blending recycling exemption request to the WIDNR. This exemption application documented that Badger Disposal is a fuel blender engaged in beneficial use or reuse of hazardous waste and is in compliance with the requirements for such exempt facilities imposed by Wis. Admin. Code Sections NR 625.07 and 625.08.

On August 23, 1996, Badger Disposal received a Conditional Approval for Legitimate Recycling Exemption – Hazardous Waste Burned from the WIDNR. A copy of the Conditional Approval for Legitimate Recycling Exemption is located in Appendix B.

2.2 Environmental and Health Standards NR 630.05

2.2.1 Groundwater, Human Health and Environmental Standards

Groundwater and surface waters in the Milwaukee/Waukesha area have high natural hardness (Holt, 1970). The average total mineral content of groundwater of all aquifers underlying this area is 435 parts per million (ppm). Sulfate levels in some wells exceed the drinking water standard of 250 ppm. Chloride and iron contents are generally low but can be problematic on a local basis. Hardness of groundwater generally increases with depth (Foley, 1953).

Because of the engineered secondary containment around the storage and processing areas in both the existing and proposed building, the chance of an accidental leak or spill that could escape from the site and enter surface or groundwater is negligible. Such a release incident has not occurred during the history of the existing facility. Further, there are no significant geological or topographic features on the site. Because the facility has only negligible potential to affect any of the surrounding area, extensive geotechnical data is not relevant to this facility.

Because of the character of Badger Disposal's current and proposed operations, the facility does not affect groundwater or surface water and has negligible potential to do so.

2.2.2 Surface Water, Human Health and Environmental Standards

Based on a map of site topography prepared for the site and surrounding area (see Sheet 3 of 18), there is approximately 23 feet of relief across the site. The ground surface drops from the highest point on the site, 733.4 feet above mean sea level (MSL) to approximately 710 feet above MSL on the southeast side of the site and approximately 720 feet above MSL on the northern boundary of the site. The majority of the site is flat at approximately 733 feet above MSL. Present on the northern/northeastern boundary of the site are Chicago and Northwestern Railroad tracks with an elevated grade. The railroad trends northwest to southeast. This railroad grade influences site surface water runoff in that the lowest part of the site is adjacent to the south side of this grade. This causes site drainage to occur to the southeast along this railroad grade. There are no surface water bodies on-site.

2.2.3 Air, Human Health and Environmental Standard:

Both the existing and proposed buildings have minimal physical impact on the population and environment of the surrounding area.

During normal operations of the existing facility the potential exists for minimal amounts of volatile organic compounds (VOCs) to be released from drums when they are opened briefly for sampling. However, in the expanded facility, when drums are processed, or when volatile liquids are blended and/or stored in tanks, both the process and storage units will be vented through appropriate air pollution control devices to limit emissions to regulatory levels. Major truck parking and maneuvering areas are paved, and as such dust generation on the site will be minimal from vehicle movement.

It is possible for accidental leaks or spills to have an adverse impact upon facility operations; however, extensive physical barriers, such as engineered secondary containment structures, and operational barriers, such as the precautionary procedures described in the Training Plan,

Preparedness and Prevention Plan and Inspection Schedule, reduce the possibility of such adverse impacts. The effectiveness of these procedures has been demonstrated by the absence of such accidental adverse impacts during the past years of operation of the existing facility.

Badger Disposal will obtain an Air Pollution Control Construction Permit from the WIDNR prior to construction of the tank farm and lab pack building.

2.3 Required Notices – NR 630.10

2.3.1 Waste Received from a Foreign Source

Badger Disposal does not receive hazardous waste from foreign sources.

2.3.2 Transfer of ownership or operations

If Badger Disposal transfers ownership or operation of the facility during its operating life, Badger Disposal will notify the new owner in writing of the requirements of ss.NR 600.04 and 620.15 and chs. NR 630 to 685.

2.3.3 Generator Notification

For waste received from an off-site source, Badger Disposal informs the generator in writing that the Badger Disposal facility has the appropriate license for, and will accept the waste that the generator is shipping. Badger Disposal keeps a copy of this written notice as part of the operating record. A copy of this notification is located in Appendix C.

2.4 Identification Number – NR 630.11

The EPA ID# for Badger Disposal is WID988580056. A copy of the original EPA Notification of Hazardous Waste Activity is located in Appendix A.

2.5 Waste Analysis Plan – NR 630.12 and NR 630.13

A copy of Badger Disposal's Waste Analysis Plan is located in Appendix D.

2.6 Security – NR 630.14

The Badger Disposal transfer/storage facility property is surrounded by a chain link security fence with three strand of barbed wire on top. The fence is eight feet high overall.

Warning signs reading: "DANGER UNAUTHORIZED PERSONNEL KEEP OUT" are posted at each entrance to the active portion of the facility and at other locations, in sufficient numbers to be seen from any approach to the active portion. The legend is legible from a distance of 25 feet. An electronic access gate is continually monitored for entrance of unauthorized personnel. All gates are kept closed and locked during non-operating hours of the facility. Gates are kept closed during receiving hours and monitored for incoming trucks and visitors by Badger Disposal Personnel. A gear driven operator with intercom mounted to the gate post has been installed on the main gate. Service doors to the active portion of the facility are kept locked at all times. During operating hours, all persons entering the facility are required to enter the office building and state their business to the receptionist and sign a visitor's log. In the case of waste or materials delivery trucks, the delivery will be accepted (or tentatively accepted in the case of waste deliveries) prior to being directed and/or escorted through the facility. All non complying entrants are treated as unauthorized entrants and are asked to leave the facility. Unauthorized entrants are detected by facility personnel. During non operating hours, the fence and locked gates control unauthorized entry to the facility.

Access is controlled through the warehouse and is limited to employees and escorted visitors. There is an internal alarm system throughout the facility and office that is monitored 24 hours a day. Badger Disposal is equipped with an internal communications system capable of providing immediate notification to facility personnel of any unauthorized access, there are 2-way radios and emergency telephones in the facility capable of summoning emergency agencies including fire and police departments.

2.7 General Inspection Requirements – NR 630.15

A copy of Badger Disposal's Inspection Schedule is located in Appendix E.

2.8 Personnel Training – NR 630.16

A copy of Badger Disposal's Training Program is located in Appendix F.

2.9 General Requirements for Ignitable, Reactive or Incompatible Wastes - NR 630.17

Containers holding reactive and incompatible wastes are stored in the warehouse building in a storage location that is located 50 feet from the property line. Badger will take precautions to prevent the ignition of ignitable or reactive wastes to conform with NR 630.17. These procedures include the segregation of incompatible materials and separation of materials from ignition sources such as open flames, hot surfaces, friction heat, sparks,

radiant heat, etc. To prevent sources of external ignition, explosion proof electrical equipment will be used in all ignitable storage areas. Badger Disposal does not mix incompatible wastes. Materials stored in the lab pack building will be separated by containment. It is Badger's policy not to allow smoking except in designated non-operational areas such as office areas. Badger has "No Smoking" signs in highly visible areas of the facility and main entrances.

2.10 Locational Standards – NR 630.18

The Badger Disposal facility is located in a primarily industrial area within the city of Milwaukee, Wisconsin, at a location east of the intersection of West Hemlock Street and 60th Street. The facility address is 5611 West Hemlock Street, Milwaukee, Wisconsin. The geographic coordinates of this location are north latitude 43°09'006" and longitude 87°59'001".

The legal description for the site is:

That part of the Southwest 1/4 of Section 14, T.8N., R.21E., in the City of Milwaukee, County of Milwaukee and State of Wisconsin. Commencing at the Southwest corner of the said 1/4 section; thence, N.2° 07' 15" E. on the West line of the said 1/4 section, 872.59 feet to a point; thence S.89° 59' 50" E., and parallel to the south line of the said 1/4 section, 745.03 feet to the Southwest corner of Lot 8, Block 1, Megal Good Hope Industrial Park, a subdivision of the said 1/4 section; being also the place of beginning of the land to be described; thence N.0° 01' 20" W., along the West line of Lot 8, 233.37 feet to a point; thence Southeasterly along the arc of the curve (Radius of 40 feet and bears S.0° 01' 20" E., and Long Chord is 32.46 feet and bears S.65° 51' 48" E.), 33.45 feet to a point; thence Northeasterly along the arc of the curve (Radius of 50 feet and bears N.48° 17' 44" E., long chord of 77.47 feet and bears N.87° 30' 51" E.), 88.63 feet to a point; thence Northeasterly along the arc of a curve (Radius of 50 feet and bears N.53° 16' 02" W., long chord of 64.91 feet and bears N.3° 44' 32" E.), 70.64 feet to a point; thence N.45° 46' 58" E., along the Northwesterly line of Lot 7, to the Northeasterly corner of said Lot 7, 236.79 feet to a point; thence S.47° 21' 54" E., along the Northeasterly line of said Lot 7, 436.34 feet to a point; thence S.2° 04' 23" W., along the Easterly line of said Lots 7 and 8, 158.05 feet to a point; thence N.89° 59' 50" W., along the South line of said Lot 8, 587.60 feet to the place of beginning.

The property on which the Badger Disposal facility is located covers approximately three acres.

2.10.1 Floodplain Standards

The Badger Disposal facility appears on the Federal Insurance Administration (FIA) Map Number 550278 0018C covering Milwaukee, Wisconsin (Sheet 7 of 18). The map shows that the facility is not located in a 100-year floodplain: therefore, the facility meets the locational requirements of NR 630.18(1) and no floodplain related limitations on site development are invoked. According to the FIA map, the facility is located in Zone C (areas of minimal flooding). To the east of the facility, across the Chicago and Northwestern Railroad is Lincoln Creek which runs through an area zoned as A2. Areas with an A2 zone designation are described by the Federal Emergency Management Agency (FEMA) as areas within a 100-year floodplain. Base flood elevations for this area range between 696 and 708. Elevations of the facility range from 734 to 720, which is significantly higher than the floodplain base flood elevations.

2.10.2 Wetland Standards

The facility appears on the Wisconsin Wetlands Inventory Map for Township 8 North, Range 21 East, covering Milwaukee, Wisconsin. This map shows that the facility has no wetlands; therefore, the facility meets the locational requirements of WAC NR 630.18 (2) and no wetland related limitations on site development are invoked. According to the Wetland Inventory Map, several wetland areas smaller than two acres in size are located approximately 1,300 feet northwest of the facility (Sheet 7 of 18). In addition, an artificially excavated, open water, wet soil, Palustrine wetland area is located approximately 4,200 feet southwest of the facility. Due to the distance of the above mentioned wetland areas from the facility, it is anticipated that minimal impacts, if any, to Wisconsin wetlands would occur due to Badger Disposal operations.

2.10.3 Endangered Species Habitat Standards

A letter along with topographic map and legal description was sent to the Bureau of Endangered Resources on October 31, 2005 requesting a report documenting the absence of concern species critical habitat. According to the Bureau's response, no occurrence records of Endangered, Threatened, or Special Concern species or natural communities, nor for any State Natural Areas were identified for the subject property by the Natural Heritage Inventory data files. A copy of this letter as well as the response is included in Appendix G.

2.10.4 Property Line

A map depicting the legal boundaries of the property on which the facility is located is included as Sheet 1 of 18.

2.10.5 Fault Line

The Badger Disposal facility is not located within 200 feet of a fault which has had displacement in Holocene time.

2.11 **Additional Facility Standards – NR 630.20**

2.11.1 Open Burning and Detonation of Explosives

Badger Disposal does not Open Burn or Detonate Explosives.

2.11.2 Point Source Discharges

Badger Disposal does not have process discharges directly to the waters of the state or municipal sewer system. Surface water runoff drains to an unnamed tributary of Lincoln Creek. Storm water is regulated by WPDES Permit #WI-S067857-2. Badger Disposal maintains a Stormwater Pollution Prevention Plan.

2.11.3 Surface Water Run-On and Run-Off

The existing facility as well as future expansion are designed so that all storage and handling activities are conducted within enclosed buildings or under canopy. This eliminates the possibility of precipitation accumulation in the containment structures for all storage areas. To minimize the possibility of runoff, Badger Disposal performs the following preventative actions:

- Incoming materials are prescreened prior to acceptance.
- Accepted materials are then directed into the container storage area. All handling and storage areas are appropriately contained.
- Loading and unloading areas are paved and diked in a manner to preclude runoff from entering surface waters and groundwater.

2.11.4 Generation or Removal of Waste

All outbound hazardous waste shipments from Badger Disposal will comply with the documentation requirements of NR 615.

2.11.5 Closure of Noncomplying Portions of Facilities

Badger Disposal does not have any portions of its facility which do not comply with the applicable requirements of s. NR 600.04 and chs. NR 630 to 685, therefore no closure activities have taken place.

2.11.6 Water Quality

Badger Disposal is in compliance with applicable requirements of state water quality management plans under ch. 283, Stats.

2.11.7 Nonpoint Source Discharges:

The existing facility is designed so that all waste storage and handling activities are conducted within enclosed buildings. As such, stormwater contact with waste does not occur. Surface runoff at the existing facility is intercepted by a network of catchment basins and drop inlets that discharge via a 36-inch storm sewer to an intermittent drainage ravine northeast of the facility. This runoff ultimately discharges to an unnamed tributary of Lincoln Creek.

Stormwater runoff in contact with waste or waste handling activities at the proposed new building is minimized through various engineering controls. Specifically, paved and diked containment areas will be constructed to prevent waste materials from escaping to the environment wherever these materials are handled or stored. Furthermore, all bulking and repackaging will occur within enclosed buildings with curbing and/or dikes and the tank farm will have a canopy.

2.11.8 Potential for Discharge

In order to prevent contamination of groundwater, the Badger Disposal facility will utilize primary, secondary, and in some case, tertiary containment for all operations. In addition, Badger Disposal has several policies in place to further prevent groundwater impacts. These policies include runoff prevention, emergency spill procedures, precipitation management policies, etc.

Area water supply wells draw groundwater from the sandstone and Niagara dolomite aquifers. The sandstone aquifer is most frequently used in the area and is overlain by Maquoketa Shale which acts as a confining layer. The Niagara aquifer is overlain by 50 to 100 feet of glacial till (mainly clay). Thus, in the unlikely event of a spill or release escaping the containment structures, potential for contamination of groundwater resources would be minimal.

2.12 Preparedness and prevention – NR 630.21

A copy of Badger Disposal's Preparedness and Prevention Plan is Located in Appendix H.

2.12.1 Facility Design and Construction

The Badger facility is designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden discharge of hazardous waste or hazardous waste constituents to the air, land or surface waters which could be harmful to human health or the environment. Badger also maintains policies which include safety and operational guidelines which are also protective of human health and the environment including a policy which restricts smoking to only non-operational areas of the facility.

The Badger Disposal facility is designed in accordance with local building codes and requirements of WAC NR 630, NR 640 and NR 645 for containment. All containment areas are designed in accordance with the requirements of WAC NR 640 and NR 645. The warehouse/process building is constructed of 12-inch thick outside walls and 6-inch thick inside walls. Where there are exits to non-containment areas, dike walls are constructed at least 6-inches high and 10-inches thick.

Electrical systems and equipment at Badger are designed to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil or surface water which could threaten human health or the environment. All electrical systems and equipment meet the applicable code requirements. All electrical systems and equipment are explosion proof in operational areas throughout the warehouse building.

2.12.2 Alarm System, Communication Devices, Fire Extinguishers/Suppression System

The Badger Disposal facility is equipped with an alarm system. This system is used in the case of an emergency or emergency drill. The alarm allows instruction and information to be supplied to plant personnel.

Badger utilizes three forms of communications in the event of an emergency. These include telephones, radios and an alarm system. Two-way radios are carried by all Badger supervisors. In the event of an emergency, any or all of these devices will be used to alert employees and notify proper personnel, agencies and/or emergency response teams.

Hand held and portable fire extinguishers are located throughout the warehouse and office areas which would be used, when necessary, in the case of an emergency. In addition to these fire extinguishers, the warehouse building storage/process area is equipped with an automatic aqueous film forming foam (AFFF) fire suppression system.

There is a fire hydrant located to the North of the main access gate. The City of Milwaukee has the responsibility of maintaining this fire hydrant in operable condition.

2.12.3 Access to Communication Devices

Since operations at Badger's facility include the handling of hazardous wastes, all employees involved with pouring, mixing, blending combining or otherwise handling of hazardous wastes have immediate access to internal and/or external alarm and communication devices. It is Badger's policy not to allow any employee to work on-site without at least one other employee present.

2.12.4 Testing and Maintenance of Equipment

All facility communication and alarm systems, fire protection equipment, spill control equipment and decontamination equipment is inspected, tested and maintained as necessary to assure its proper operation in the event of an emergency. Badger's inspection schedule is described in the Inspection Plan. In addition, records of these inspections and any repairs or other remedial actions performed on inspected items are included in the Inspection Log pursuant to WAC NR 630.15(4).

2.12.5 Aisle Spacing Requirements

Badger maintains aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the facility operations in an emergency. Specific aisle spacing maintained at the Badger facility include three-foot aisle spacing between rows of drums and at least six-foot wide aisles at all exit routes to all doorways.

The three-foot aisle spacing of hazardous waste drums allow direct access to each and every drum in case of emergency. It is Badger's policy to keep aisle ways clear at all times. Should a drum be noted to be leaking, a hand drum dolly will be used to remove the drum from the storage area. The three-foot aisle spacing provides ample room to wheel the dolly down an aisle and remove a drum from any given row of drums.

2.12.6 Service Arrangements

To comply with WAC NR 630.21 (6), Badger issues a copy of its most current Contingency Plan, hazardous materials description and operations information to the local police, fire department and hospital. These groups are also invited for a site visit in order to familiarize them with plant operations. Copies of letters which were submitted, via certified mail, to local police, fire and hospitals are included in Appendix C of the Contingency Plan.

2.13 **Contingency Plan and Emergency Procedures**

A copy of Badger Disposal's Contingency Plan is located in Appendix I.

2.14 **Manifest Requirements – NR 630.30**

Badger Disposal requires all generators to initiate a Wisconsin manifest or Bill of Lading for incoming hazardous shipments.

Badger Disposal will not accept a manifested shipment of hazardous waste unless it meets the following requirements:

- The manifest is complete.
- Each container and portable tank containing hazardous waste is properly marked and labeled.

- The manifests, the markings and the labels are consistent.

Badger Disposal does not accept a hazardous waste that it is not licensed to manage based upon its operating license and licensing exemption.

Hazardous waste shipments accompanied by a manifest are managed as follows:

- a. Badger Disposal signs and dates each copy of the manifest to certify that the Hazardous waste covered by the manifest was received.
- b. Any significant manifest discrepancies are noted on each copy of the manifest.
- c. The transporter is immediately given one copy of the signed manifest.
- d. Within 30 days after the delivery, Badger Disposal sends a copy of the manifest to the generator.
- e. Badger Disposal retains a copy of each manifest for at least 3 years from the date of delivery.
- f. Badger Disposal sends a copy of each manifest to the WIDNR within 5 working days.

Badger Disposal does not receive hazardous waste from rail or water bulk shipment transporters.

Upon discovering a significant manifest discrepancy, Badger Disposal attempts to reconcile the discrepancy with the generator or transporter with telephone conversations. If the discrepancy is not resolved within 15 days after receiving the waste, Badger Disposal will immediately submit to the WIDNR a letter describing the discrepancy and attempts to reconcile it, along with a copy of the manifest or shipping paper at issue.

All out going hazardous waste shipments generated by Badger Disposal comply with the requirements of ch. NR 615.

2.15 Recordkeeping NR 630.31

Badger Disposal maintains a written operating record at the facility which contains the following information:

- Waste description, common name, hazardous waste number, physical form, quantity, size, generator name and manifest document numbers.
- Date of storage.
- Location of the waste within the facility.

Additional reports maintained at Badger Disposal include:

- Records and results of waste analyses performed.
- Summary reports and details of all incidents that required implementing the Contingency plan.
- Records and results of inspections.
- Monitoring, testing or analytical data and corrective action where Required.
- Closure – long term care cost estimates.
- A waste minimization certification statement.

All records will be furnished upon request and made available at all reasonable times for inspection by any officer or employee of the WIDNR. A copy of records of waste disposal locations and quantities will be submitted to the department and the local municipality upon closure of the facility. The identity and location of all stored hazardous waste will be known throughout the entire storage period.

Closure costs are updated on an annual basis. The waste minimization certification statement is signed by the facility owner and forwarded to the WIDNR annually.

2.16 Waste Minimization – NR 630.32

Badger Disposal maintains a waste minimization certification which is signed by the owner annually. This certification states that a program is in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by Badger Disposal to be economically practicable. This certification states that the proposed method of treatment, storage or disposal is the practicable method currently available to Badger Disposal which minimizes the present and future threat to human health and the environment.

As part of its annual reporting, Badger Disposal provides a description of the efforts undertaken during the calendar year to reduce the volume and toxicity of hazardous waste generated.

2.17 Reporting – NR 630.40

2.17.1 Annual Activity Report

Badger Disposal submits an annual report to the WIDNR by March 1st of each year. This report is submitted electronically on department forms and covers facility activities during the previous calendar year. This report includes the following information:

- * The identification number, name and address of the facility.
- * The calendar year covered by the report.
- * The identification number of each hazardous waste generator from which hazardous waste was received during the calendar year.
- * A description and the quantity of each hazardous waste received during the calendar year.
- * The method of treatment, storage or disposal for each hazardous waste.

Annual reports are accompanied by a certification signed by the owner.

On an annual basis, Badger Disposal submits to the WIDNR the most recent closure costs and a waste minimization statement.

2.17.2 Unmanifested Waste Report

Badger Disposal will not accept any hazardous waste from off-site without an accompanying manifest.

2.17.3 Additional Reports

In addition to submitting the annual activity reports, Badger Disposal will report the following:

- Discharges, fires and explosions.
- Facility closures.

SECTION 3
FEASIBILITY AND PLAN OF OPERATION REPORT
[Sections NR 640.06(1) and NR 645.06(1)]

3.1 Narrative Description NR 640.06(1)(a)/NR 645.06(1)(a)

3.1.1 Legal Description

The Badger Disposal facility is located in a primarily industrial area within the city of Milwaukee, Wisconsin, at a location east of the intersection of West Hemlock Street and 60th Street. The geographic coordinates of this location are north latitude 43°09'006" and longitude 87°59'001". A map depicting the legal boundaries of the property on which the facility is located is included as Sheet 1 of 18.

The legal description for the site is:

That part of the Southwest 1/4 of Section 14, T.8N., R.21E., in the City of Milwaukee, County of Milwaukee and State of Wisconsin. Commencing at the Southwest corner of the said 1/4 section; thence, N.2° 07' 15" E. on the West line of the said 1/4 section, 872.59 feet to a point; thence S.89° 59' 50" E., and parallel to the south line of the said 1/4 section, 745.03 feet to the Southwest corner of Lot 8, Block 1, Megal Good Hope Industrial Park, a subdivision of the said 1/4 section; being also the place of beginning of the land to be described; thence N.0° 01' 20" W., along the West line of Lot 8, 233.37 feet to a point; thence Southeasterly along the arc of the curve (Radius of 40 feet and bears S.0° 01' 20" E., and Long Chord is 32.46 feet and bears S.65° 51' 48" E.), 33.45 feet to a point; thence Northeasterly along the arc of the curve (Radius of 50 feet and bears N.48° 17' 44" E., long chord of 77.47 feet and bears N.87° 30' 51" E.), 88.63 feet to a point; thence Northeasterly along the arc of a curve (Radius of 50 feet and bears N.53° 16' 02" W., long chord of 64.91 feet and bears N.3° 44' 32" E.), 70.64 feet to a point; thence N.45° 46' 58" E., along the Northwestern line of Lot 7, to the Northeasterly corner of said Lot 7, 236.79 feet to a point; thence S.47° 21' 54" E., along the Northeasterly line of said Lot 7, 436.34 feet to a point; thence S.2° 04' 23" W., along the Easterly line of said Lots 7 and 8, 158.05 feet to a point; thence N.89° 59' 50" W., along the South line of said Lot 8, 587.60 feet to the place of beginning.

3.1.2 Ownership

The Badger Disposal of WI., Incorporated site is owned by: Badger Investment Realty, LLC
5611 West Hemlock Street
Milwaukee, WI 53223

3.1.3 Site size and Land Use and Zoning

The property on which the Badger Disposal facility is located covers approximately three acres. The Badger Disposal facility is bounded on the north by JES Lighting Inc. and EOG Environmental Inc., a lighting distributor and a waste transporter and brokerage firm, respectfully; on the northeast by the Chicago and Northwestern Railroad; on the east and south by Packaging Corporation of America, a manufacturer of cardboard boxes; on the west by Centercom, a reproducer of video tapes. There are approximately 281 single family residential homes, 41 multi-family dwellings, and approximately 50 commercial/industrial establishments located within 0.5-miles of the facility. The more heavily populated residential subdivisions begin approximately 0.2 miles northeast of the facility across the railroad tracks. A Plat Map indicating property boundaries within 0.5 miles of the facility is provided as Sheet 5 of 18.

No nursing homes or hospitals are located within a 1/2 mile radius of the Badger Disposal facility. There are two country clubs; to the west, approximately 810 feet from the Badger Disposal facility is Brynwood Country Club and to the east, approximately 1,350 feet from the Badger Disposal facility is Tripoli Golf Club. No other parks or recreational areas are known to exist within a 1/2 mile radius of the Badger Disposal facility.

Zoning maps provided by the City of Milwaukee Department of City Development show that the facility is zoned for industrial use, which is consistent with the present and proposed facilities. The properties surrounding the Badger Disposal facility are currently used for manufacturing, warehousing, and other commercial activities. Surrounding property owners include:

North of Badger Disposal
5606 W. Hemlock Street
Megal Development Corp
P.O. Box 18661
Milwaukee, WI 53218

Northeast of Badger Disposal
5601 W. Hemlock Street
Megal Development Corp.
12650 Lisbon Road
Brookfield, WI 53005

East/Southeast of Badger Disposal
5400 W. Good Hope Road
Strangco Inc.
1900 Spring Road
Oak Brook, ILL 60523

West of Badger Disposal
5621 W. Hemlock Street
Specialty Services Inc.
5737 W. Hemlock Street
Milwaukee, WI 53223

South of Badger Disposal
5600 W. Good Hope Road
Tenneco Packaging Inc.
1025 W. Everett Road
Lake Forest, IL 60045

3.1.4 Area Served

Badger Disposal currently serves over 900 clients which include a variety of commercial, institutional, governmental and industrial companies nationwide that do not generate bulk quantities of waste. The primary function of this facility is bulking and transfer of hazardous and nonhazardous wastes in order to gain access to secondary markets. Customers include the following:

- Colleges and Universities
- Printing Companies
- Government Institutions
- Pharmaceutical Manufacturers
- Environmental Consultants
- Chemical Manufacturers
- Automobile Dealerships
- Automobile Manufacturers
- Railroads
- Can Manufacturers
- Film Manufacturers
- Adhesive Manufacturers
- Machine and Parts Manufacturers

3.1.5 Material Balance

The majority of the wastes to be received at Badger Disposal will include organic listed wastes (F001, F002, F003, F005 and D001) and solid wastes which will be recycled by Badger Disposal for re-refining or energy recovery as a fuel for industrial furnaces. Once the operating permit is extended by the WDNR, Badger Disposal will have the capacity to store up to 1,189,500 pounds of F001, F002, F003, F005, and D001 wastes. Badger Disposal will also accept various Toxicity Characteristic wastes (D-listed wastes); hazardous wastes from non-specific sources (F-listed wastes); hazardous wastes from specific sources (K-listed wastes); various discarded commercial chemical products, off-specification species, container residues, spill residues, etc. (P-listed and U-listed wastes) for bulking and transport for off-site metal recovery, neutralization, etc. Polychlorinated Biphenyl (PCB) wastes and gases stored in cylinders will be accepted at Badger Disposal for storage only. Once truckload quantities of these wastes have

been accumulated, Badger Disposal will send these materials to a permitted facility for treatment and disposal.

Wastes generated by Badger Disposal will include primarily solid wastes (i.e., containers not suitable for reclamation, office waste, etc.). Examples of material balance at this facility are as follows:

Scenario 1

Badger Disposal receives a lab pack containing the following chemicals:

Sulfuric Acid	1 pint	D002
Phosphoric Acid	1/2 gallon	D002
Hydrochloric Acid	1 quart	D002
Nitric Acid Solution 40 %	1 quart	D002
Chromic Acid Solution	4 oz.	D002, D007
Hydrofluoric Acid	1 pint	D002

All of these items will be depacked and either consolidated into the acid tank or repackaged into a larger drum. Any items that are received in a lab pack that could not be bulked will be repackaged. This container will be shipped for disposal to an off site disposal facility. The containers will be triple rinsed with the rinse water going into the consolidated drum. The glass jars will then be crushed and sent to a glass reclaimer.

Scenario 2

Badger Disposal receives 55-gallon drums of acetone from an industrial client which carries the EPA waste codes D001 and F003. These drums are pumped into a bulk fuel tanker. When the materials from this tanker ships off-site, the manifest will carry the D001 and F003 codes as well as any other codes from material bulked into this tanker. The RCRA empty drums will be sent off-site to a drum reclaimer.

Scenario 3

Badger Disposal receives a lab pack containing the following chemicals:

Acetone	1 pint	D001, F003
Hexane	1 quart	D001, F005
Toluene	1 pint	D001, F005
Allyl Alcohol	2x1 pint	D001, P005
Hexachlorobenzene	1/2 pound	U127, D032
Methylene Chloride	1 quart	F002
Phenol	1 pound	U188
Methyl Ethyl Ketone	1/2 gallon	D001, F005, D035
Methanol	2x1 quart	D001, F003
Pyridine	1 pint	D001, F003, D038

All of these items will be depacked and consolidated for fuel. All of the waste codes will be retained through the bulking process. When the materials ship off-site, the manifest will carry all waste codes. The containers would be triple rinsed with the rinse water going into the drum. The glass jars would then be crushed and sent to a glass reclaimer.

3.1.6 Traffic Information

Currently, Badger Disposal receives approximately four waste delivery trucks each day. When the facility is fully expanded, it is expected that an average of eight waste delivery trucks will be received each day. This will include van, trailer, trucks carrying waste in drums and totes, tanker trucks carrying bulk organic liquids and pumpable sludges, and bulk solid wastes in Roll-Off Boxes and Lugger Boxes. Transport will be via vehicles having a gross (loaded) weight of less than 80,000 pounds.

There also will be truck traffic from the facility to other facilities to transfer (1) waste receipts which will not be managed at the facility, (2) wastes generated by the facility, and (3) blended fuels for use in the secondary market (i.e. sent to cement kilns). When the facility is fully developed, it is expected that this truck traffic will average up to an additional four trucks per day. These trucks will include (but are not limited to) van, trailer, tank trucks, and Roll-Off/Lugger-Boxes having a gross (loaded) weight less than 80,000 pounds.

Trucks usually reach the facility by traveling either Interstate 43 or U.S. Highway 41/45 (either northbound or southbound) and exiting onto County Route PP (Good Hope Road) and traveling approximately 3 miles westbound to North 60th Street from Interstate 43 or traveling approximately 3 miles eastbound from U.S. Highway 41/45. Then turning northbound on North 60th Street approximately 1/4 mile to West Hemlock Street. After turning eastbound on West Hemlock Street, traveling approximately 1000 feet to the entrance gate of the facility at the end of the road. Trucks leaving the facility will follow this same route in reverse. U.S. Highway 41/45 and Interstate 43 are both four-lane highways which typically carry heavy truck traffic and which will easily accommodate the facility traffic described above. Good Hope Road is a straight, four-lane road and North 60th Street is a two-lane road. Good Hope Road and North 60th Street are both capable of carrying the traffic described above. The travel routes to and from the facility are the same as described above. All of the roadways on the facility will be asphalt paved and will be designed and constructed to accommodate vehicles typically received at Badger Disposal.

Sheet 8 of 18 shows the principle traffic patterns for the facility. All personnel and visitor vehicle(s) are to be parked outside of the operating portions of the facility. For the existing facility, waste delivery trucks enter the facility on the northwestern side of the storage/process building, next to the administrative offices or back into the sunken loading dock located in the northwest corner of the storage/process building. After confirmation of manifest and shipping papers at the office, the trucks are then directed to proceed to the dock area for loading/off-loading.

For the expanded facility, waste delivery trucks enter the facility through the main gate located on the north end of the facility property. Trucks waiting to enter the facility while multiple loads are being delivered, will be staged within a fenced area located on the Badger Disposal property. This area will only be used for truck staging when heavy traffic is experienced at the site loading and unloading facilities and roll-off staging area which are located to the South. The trucks will be attended by their drivers while waiting to load or unload. After confirmation of manifest and shipping papers at the office, the trucks are then directed to proceed to the dock areas for loading/off-loading. After the loads are off-loaded and have been accepted at the facility, the trucks will leave the facility through either the gate located north of the storage process building or the gate north of the sunken loading dock.

3.1.7 Estimated Quantities and Characteristics of Wastes and Methods of Disposal

Badger Disposal shipped the following hazardous wastes off-site in 2004:

Waste Codes	Quantity in lbs.	Disposal Method
D001, F001, F002, F003, F004, F005	1,910,810	Fuel Blending
D002	1,125,000	Neutralization
F006	480,000	Chemical Treatment
D007, D008, D009	89,224	Chemical Treatment
D004, D005, D006	101,066	Chemical Treatment
D003, D001	25,550	Incineration
F002	243,840	Chemical Treatment
F007	28,000	Chemical Treatment

3.1.8 Person Responsible for Plant Construction and Operation

Henry Krier, President of Badger Disposal of WL, Inc. is the person responsible for plant construction and operation.

3.1.9 Air Discharge

Drums of hazardous waste that are received at Badger Disposal meet the applicable U.S. department of transportation regulations on packaging hazardous material for transportation. All containers are equipped with a cover and closure device that forms a continuous barrier over the container opening such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps or other open spaces into the interior of the containers. The containers are covered at all times when they are in storage. Sampling of containers and removal of container contents occurs through the bore holes on the drum lid via insertion of a drum pump. Liquid wastes are received and shipped out by tanker truck in a closed-loop operation that does not result in emissions.

The air emissions from the proposed future operations (tank farm, lab pack building, etc.) will be controlled. Therefore, the emissions are not expected to increase significantly. An Air Pollution Control Construction Permit will be obtained for the proposed expansion.

3.1.10 Hazardous Waste Storage Procedures

Storage of hazardous waste occurs in the existing Badger Disposal warehouse/processing building and proposed lab pack building. These buildings are constructed to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil or surface water which could threaten human health or the environment. All containment areas are designed in accordance with the requirements of WAC NR 640 and NR 645. The warehouse/process building is constructed of 12-inch thick outside walls and 6-inch thick inside walls. Where there are exits to non-containment areas, dike walls are constructed at least 6-inches high and 10-inches thick.

Electrical systems and equipment at Badger Disposal are designed to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil or surface water which could threaten human health or the environment. All electrical systems and equipment meet the applicable code requirements. All electrical systems and equipment are explosion proof in operational areas throughout the facility.

Badger Disposal has several preventative actions in place to minimize the possibility of failure and adverse impacts of failure. These actions include:

- Incoming materials are prescreened prior to acceptance as described in the Waste Analysis Plan. Accepted materials are then directed into an incoming material storage tank or into the container storage area.
- Employee training and immediate availability of personnel protection equipment on-site contribute to immediate response to possible failures.
- Loading and unloading areas are paved and diked in a manner to preclude runoff from entering surface or groundwater.
- Daily visual inspections and regular preventative maintenance of all equipment aid in the prevention of failures.

In the event of a power outage, no environmental hazards would result because only pumps would cease to operate. All materials would continue to be contained. If for some unanticipated reason auxiliary emergency power is required, Badger Disposal will obtain an emergency power generator.

In the event any crack, leak, significant wall thinning, equipment process malfunction, or the potential for a hazardous waste release is discovered, Badger Disposal will contain, remove, decontaminate, repair and/or install to full working order, any piece of hazardous waste equipment, vessel, container, containment structure, and associated controls.

If a situation does occur which is beyond the capacity of immediate internal correction, Badger Disposal will call on private contractors to render immediate emergency assistance.

Good housekeeping practices are employed at all times to limit accumulation of dust and debris within and on the exterior of the Badger Disposal facility.

At the end of the day, all of the drums that were being processed are covered with lids and placed back into their designated storage area.

3.1.11 Disposal Facilities

Badger Disposal sends hazardous and solid wastes to the following facilities:

Giant Cement Company Harleyville, SC	MFR/Continental Cement Hannibal, MO
Pollution Control Industries East Chicago, IN	Energis LLC Clarksville, MO
Systech Environmental Paulding, OH	Superior Special Services Port Washington, WI
WTI East Liverpool, OH	Mercury Waste Solutions Union Grove, WI
American Ref-Fuel Company Niagra Falls, NY	TERRIS/ENSCO El Dorado, AR
Onyx Environmental Services Port Arthur, TX	Lone Star-Alternate Fuels Division Greencastle, IN

Stablex Canada Blainville, PQ	Safety Kleen Systems, Inc. Smithfield, KY
Michigan Disposal Belleville, MI	Rineco Benton, AR
Envirite of Illinois Inc. Harvey, IL	Greencastle WDF Facility Greencastle, IN
Wayne Disposal Belleville, MI	EQ Detroit Detroit, MI
OSI Environmental Inc. Milwaukee, WI	Waste Management – Orchard Ridge Menomonee Falls, WI
EMCO Chemical Distributors Kenosha, WI	CRT Processing Corporation Janesville, WI
Chem Works Treatment Facility Milwaukee, WI	Jacobus Environmental Services Madison, WI

3.1.12 Facility Layout

Badger Disposal is a commercial recycling complex for waste solvents, paints, sludges and various other organic and inorganic materials. Badger Disposal's operations consist of various processes for recovering, re-packing, reclaiming and/or recycling organic materials generated by a wide variety of industries located throughout the United States. The existing Badger Disposal facility consists of an 11,000 square foot container process/storage building. The building is designed with 12" thick outer walls, reinforced concrete floors, at each entrance and a 6 hour rated fire wall. In addition, the Badger Disposal facility includes various non-regulated areas such as a laboratory, reception area and administrative offices. The existing building has the capacity to store 720 hazardous waste containers and 1,500 non hazardous waste containers. Since the total of 720-55 gallon containers of hazardous waste and 1,500-55 gallons of solid waste is greater than the allotted space, the maximum storage available is 1,720-55 gallon drums or their equivalents. A copy of the Conditional Class 1 Modification Determination from the WIDNR dated April 6, 2004 outlining storage is located in Appendix O. Processing that takes place in the existing facility includes transfer of organic and inorganic materials from drums into tanker trucks for shipment to permitted Treatment Storage and Disposal Facilities as well as a

lab pack re-packaging operation that allows Badger Disposal the capability of re-packaging compatible laboratory chemicals from small containers into larger containers for off-site shipment to permitted Treatment Storage and Disposal Facilities. Sheet 1 of 18 shows the drum storage layout of the existing building as well as the drum unloading area, drum crushing area, and roll-off area.

The proposed expanded facility will include a Bulk Liquid Storage Tank Unit, a Lab Pack Repack and Bulking Unit, additional Container Storage Unit capacity and a Bulk Solids Storage Unit, as shown on Sheet 2 of 18. The proposed expansion of the existing building will consist of approximately 6,000 square feet of new construction on the south end of the building. The proposed tank farm and lab pack building will include new construction of approximately 9,200 square feet.

3.1.13 Timetable for Site Construction, Start up and Operation:

Retrofit of the existing process/storage facility was completed in 1996. The proposed expansion of the facility, which includes an addition to the existing process/storage facility for increased storage capacity, is expected to be completed in 12 to 36 months following the license renewal.. Henry Krier of Badger Disposal will be the primary person responsible for all site construction.

3.1.14 Operating Schedule

Badger Disposal currently operates 10 hours per day, 7:00 a.m. to 5:00 pm, weekdays only. The facility may operate longer hours and/or weekends as required to meet business needs.

3.1.15 Groundwater and Surface Water Quality

Provisions for protection of groundwater and surface waters during construction of the facility include the installation of erosion control measures within and around the site prior to land disturbance. Specifically, geotextile silt fencing will be installed around the site prior to excavation to intercept silt laden stormwater runoff prior to entering the nearby water course and, ultimately, Lincoln Creek. Filter fabric will also be placed within the existing storm sewer inlets on and near the site, and in new inlets as they are installed. An erosion control plan for construction is shown in Appendix Q.

No special measures are anticipated for protection of groundwater beyond those provided for surface waters, as there is presently no hazardous or contaminated material on site which could reach groundwater, and none are expected to be produced as a result of construction activities.

3.1.16 Equipment Capacities and Dimensions

The Badger Disposal facility is currently permitted to store 720 hazardous containers and 1,500 non hazardous containers or some combination of hazardous and nonhazardous containers. Future expansion of the existing warehouse will allow for an additional 984 non hazardous containers and 492 non-ignitable hazardous containers. Containers managed in the storage areas include drums in various sizes such as 5, 10, 14, 20, 30, 55 and 85 gallon, 275 gallon totes and cubic yard bags and boxes. Solid containers and lab packs are stored two high, liquids are stored on a single level. The lab pack building will provide storage of 145 hazardous drums and 11,000 gallons of storage for acidic/basic wastes in two 5,500 gallon storage tanks. The tank farm will allow for storage of 48,000 gallons of hazardous waste in four storage tanks. The bulk solids area will provide storage for 6 – 20 cubic yard roll off boxes.

3.1.17 Location requirements

Location requirements are located in Section 2.10 of this document.

3.2 Regional Information NR 640.06(1)(b)/NR 645.06(1)(b)

3.2.1 Topography

The topography of the existing facility is shown on Sheet 1 of 18. As shown on Sheet 2 of 18 the proposed facility will have similar topographic features.

3.2.2 Surface Water

Based on a map of site topography prepared for the site and surrounding area (see Sheet 3 of 18) there is approximately 23 feet of relief across the site. The ground surface drops from the highest point on the site, 733.4 feet above mean sea level (MSL) to approximately 710 feet above MSL on the southeast side of the site and approximately 720 feet above MSL on the northern boundary of the site. The majority of the site is flat at approximately 733 feet above MSL. Present on the northern/northeastern boundary of the site are Chicago and Northwestern Railroad tracks with an elevated grade. The railroad trends northwest to southeast. This railroad grade influences site surface water runoff in that the lowest part of the site is adjacent to the south side of this grade. This causes site drainage to occur to the southeast along this railroad grade. There are no surface water bodies on-site.

3.2.3 Geology

The characterization of site geology and hydrogeology will describe the glacially deposited unconsolidated units, which includes topsoil, and the underlying consolidated bedrock. The description of geology and hydrogeology was based on ten driller's logs of nearby water supply wells (within 1.5 miles), the Soil Survey of Milwaukee and Waukesha Counties, Wisconsin and other geologic publications.

Unconsolidated Strata

The Badger Disposal facility is located in an area that has been identified as an end moraine for the Lake Michigan Lobe of the Wisconsin ice advance (Alden 1918). Typical end moraine stratigraphy is composed of relatively high percentages of clay till with low potential for containing large deposits of sand and gravel. As confirmed by driller's logs for the area (Appendix A), this area has a high potential for containing small to moderate deposits of sand and gravel. Generally speaking, the driller's logs show 50 to 125 feet of clay till overlying what the drillers call limestone but which is more likely dolomite.

There are two soil types that have developed in the upper till units in the area. These two soil types are briefly described in the Soil Survey of Milwaukee and Waukesha Counties, Wisconsin:

Cv, Clayey Lands - Primarily within cities or towns where the entire developed soil layer has been excavated for fill material or has been buried during development of the property. The material in this land type is mainly clay to clay loam that has been compacted which causes much potential of rainfall runoff. The soil type is unfavorable for the growth of plants.

OuB, Ozaukee Silt Loam - 2 to 6 percent slopes, well drained to moderately well drained silty soils, moderately slow permeabilities with high available water capacity. Natural fertility is moderate.

Due to the development of the existing building and rough grading of the expansion area, it is unlikely any of these soil types are present today.

Bedrock Stratigraphy

The generalized cross section for southeastern Wisconsin shows the relationship of the sedimentary bedrock that underlies the till at the site.

Based on the map of the bedrock surface, the descriptions of the formations on the generalized cross section, and the descriptions on the driller's logs, it is believed that the bedrock surface at the facility is the Niagaran age dolomite. Though the site lies near the mapped boundary for the western edge of the younger Devonian Milwaukee formation, the geologic log of the well just east of the facility identifies the bedrock surface to be Niagara dolomite.

The upper part of the Niagara is a massive light gray dolomite. The central part commonly contains some chert and is pink at many places. The lower part is a light gray dolomite which is not as massive as the upper part. The Niagara has a maximum thickness of 477 feet in Northeastern Milwaukee County. An extensive system of joints and other fractures has developed in the Niagara and have been enlarged by solution. Though the openings are not cavernous, they make the very dense dolomite permeable.

3.2.4 Hydrogeology

Pleistocene Deposits (Wisconsin Drift)

Permeable sand and gravel deposits in or at the base of the glacial drift are capable of providing water in quantities adequate for domestic or farm supply uses. However, there have been no borings at the site to confirm the existence of a water bearing unit of this type. Although the driller's logs of water supply wells show sand, gravel and sand and gravel units at 3 to 13 feet thick, it is not known that these units could produce this quantity of water.

Niagara Dolomite

The Niagara is a dense dolomite that is an inconsistent aquifer. Groundwater occurs along joints and bedding planes in this formation. Solution enlarges these openings especially in the upper part of the formation where the preglacial land surface was exposed. Some wells in the Niagaran in the area can produce as much as 600 gallons a minute where as others only produce enough for domestic use (Foley et.al, 1953).

Sandstone Aquifer

The shallow inconsistent aquifers consisting of the glacial drift of Pleistocene age and the Niagara dolomite of Silurian age are separated from the deeper Cambrian and Ordovician age sandstone aquifer that is most frequently used in the area by 90 to 225 feet of Maquoketa Shale which acts as a confining layer. The sandstone aquifer consists of the St. Peter, Eau Claire and Mt. Simon formations with the St. Peter and Mt. Simon being the most productive formations.

3.2.5 Groundwater and Surface Water Quality

Groundwater and surface waters in the Milwaukee/Waukesha area have high natural hardness (Holt, 1970). The average total mineral content of groundwater of all aquifers underlying this area is 435 parts per million (ppm). Sulfate levels in some wells exceed the drinking water standard of 250 ppm. Chloride and iron contents are generally low but can be problematic on a local basis. Hardness of groundwater generally increases with depth (Foley, 1953).

3.2.6 Climatology

The Badger Disposal facility is located in the southeast section of the state of Wisconsin which usually has warm summers and mild winters due to the area's proximity to Lake Michigan. Summer temperatures are typically in the 68°F to 73°F range and winter temperatures are typically mild in the 19°F to 26°F range as reflected by the July/August and January/February monthly means.

The average annual total precipitation in southeastern Wisconsin is 31.26 inches, expressed as water equivalent. Only 19.2 percent of the average annual total precipitation is snowfall. Prevailing winds in the region follow a clockwise pattern in terms of the prevailing direction over seasons of the year, being northwesterly in the late fall and winter, northeasterly in the spring, and southwesterly in the summer and early fall. Wind velocities in southeastern Wisconsin may be expected to be less than 5 miles per hour about 15 percent of the time, between 5 and 25 miles per hour about 60 percent of the time, and an excess of 15 miles per hour about 26.5 percent of the time.

Figure 1 in Appendix P presents wind direction data (wind-rose) for the region. As shown by the wind rose, the region exhibits a rather uniform distribution of wind direction, that is, there are not extreme differences in the frequency of wind directions. Based on averages of the indicated percentages, the wind may be expected to blow from the southwest and northwest each about 20 percent of the time.

3.2.7 Adjacent Landowners

North of Badger Disposal
5606 W. Hemlock Street
Megal Development Corp
P.O. Box 18661
Milwaukee, WI 53218

Northeast of Badger Disposal
5601 W. Hemlock Street
.Megal Development Corp.
12650 Lisbon Road
Brookfield, WI 53005

East/Southeast of Badger Disposal
5400 W. Good Hope Road
Strangco Inc.
1900 Spring Road
Oak Brook, ILL 60523

West of Badger Disposal
5621 W. Hemlock Street
Specialty Services Inc.
5737 W. Hemlock Street
Milwaukee, WI 53223

South of Badger Disposal
5600 W. Good Hope Road
Tenneco Packaging Inc.
1025 W. Everett Road
Lake Forest, IL 60045

3.2.8 Zoning

Zoning maps provided by the City of Milwaukee Department of City Development (see Sheet 6 of 18) show that the facility is zoned for industrial use, which is consistent with the present and proposed facilities. The properties surrounding the Badger Disposal facility are currently used for manufacturing, warehousing and other commercial activities.

3.2.9 Present Land Use

The Badger Disposal property is currently utilized as a transfer, storage and recycling facility and intends to continue as such.

3.3 **Maps and Plans NR 640.06(1)(c), (d)/NR 645.06(1)(c),(d)**

3.3.1 Topographic Map

Topographic maps are provided in Appendix P, Sheet 3 of 18.

3.3.2 Plat Map

A Plat map indicating property boundaries, zoning within ½ mile of the badger Disposal facility and anticipated traffic routes within 2 miles is located in Appendix P, Sheet 5 of 18.

3.3.3 Existing site conditions map.

An existing site conditions map is located in Appendix P, Sheet 3 of 18.

3.3.4 Proposed facility plan

A proposed facility plan is located in Appendix P, Sheet 2 of 18.

3.4 Corrective Action Program NR 640.06(1)(e)/NR 645.06(1)(e)

The presence of hazardous constituents has not been detected in the groundwater at the Badger Disposal facility, therefore, a Corrective Action Program is not necessary.

3.5 Design Constraints NR 640.06(1)(f)/NR645.06(1)(f)

Badger Disposal decided to build this facility at this location because they could use their existing building which is located in an existing industrial park with major transportation routes (I45 and I43) nearby. Badger Disposal is located at the end of a cul du sac which secludes the facility from passing traffic. The site is zoned Heavy Industrial, therefore rezoning is not required. Milwaukee is the largest city and industrial center of Wisconsin. The greatest portion of targeted wastes within Wisconsin are generated in the Milwaukee area. Additionally, most of the end sites to which the fuel will be shipped are located east and south of Wisconsin (Illinois, Missouri, Michigan, etc.). Therefore a southeastern Wisconsin location provides the best transportation logistics for this operation.

3.6 Engineering Plans NR 640.06(1)(g),(h)/NR 645.06(1)(g),(h)

Engineering plans for the existing and proposed facility are located in Appendix P and Q. Plan sheets are located in Appendix P and Q.

SECTION 4 CONTAINER STANDARDS

[Sections NR 640.06(2) and NR 640.07 through NR 640.16]

4.1 Secondary Containment System NR 640.06(2)(a)

Badger Disposal stores containers of hazardous and non hazardous wastes in its existing storage/process building. This building is designed to provide environmentally safe storage for all containerized materials. The building is designed with 12" thick outer walls and reinforced concrete floors. On July 10th through July 19th, 1996 the container storage area was cleaned and sealed with an impervious coating by Parker Coatings, Inc. They completed the work and supplied the materials. The floor was shot blasted to remove all grease and oil, allowing for the best bonding between the concrete and the floor coating. They also removed the existing mineral fiber expansion joint materials around the perimeter of the slab at the wall and cleaned out the crack. The floor was cleaned with MAXI-CLEAN (supplied by Industrial Cleaning Systems, Inc.) and then rinsed with water. The perimeter crack was sealed with Parker 2300-FCF material, a semi-rigid two component epoxy designed to repair cracks and joints in industrial flooring. The slab was patched as needed with an epoxy filler suitable for use with the floor sealer. The floor was sealed with CHEMSEAL 1015-WRU a wear resistant urethane. This was applied in three coats with rollers. The floor area sealed was 9,663 S.F. According to the spec sheet at the coverage rate of 802 S.F. per gal. per mil. Using these numbers the dried sealer is 10.8 mils. thick. The floor is inspected by Parker Coatings, Inc. semi-annually and repaired as necessary. An inspection report for the cleaning and sealing of the floor was completed on October 31, 1996 by Paul M. Meier P.E. and submitted to the WIDNR on November 18, 1996 as part of our Phase 1 Construction Documentation.

Explosion proof electrical equipment is used throughout the process and storage areas. An automatic aqueous film forming foam (AFFF) fire suppression system is included in the storage and process areas. The storage/process building is designed with concrete curbing at entrances to the building to minimize the risk of any accidental spillage leaving the confines of the building. The curbing, walls and floors of the building are designed to meet the requirements of WAC NR 640.13, and are sufficiently level to ensure the integrity of the containment. There are no sewer discharges located in any operational or storage areas of the storage/process building. 4 inch high containment ramps were installed providing containment capacity of over 9,192 gallons of liquid materials in accordance with WAC NR 640.13. An additional 7,000 gallons of

containment capacity will be available upon the installation of the storage building addition. Run-on is not a concern within the building in that it is entirely enclosed. The storage/process building is designed and operated so that leaked or spilled material within any area can be easily identified and cleaned up to prevent contact with other containers. Containment pallets are used in specified areas to prevent containers from contact with standing water or potential leaks from surrounding containers. Supporting secondary containment calculations are provided in the Preparedness and Prevention Plan, included as Appendix H.

The roll-off/lugger box storage area will have secondary containment in the form of concrete curbing which will be monolithically joined to the concrete floor slab. The height of the curbing will vary with the slope of the floor slab as indicated on Plan Sheet 3 of 3. The secondary containment structure will have a capacity to hold the contents of one roll-off container (see volume calculations for secondary containment in Appendix Q). The floor slab will be pitched to collect and hold any spilled or accumulated liquids within the secondary containment structure. The storage area will be enclosed with a canopy. The canopy will be designed to allow safe loading and unloading of roll-off containers and also prevent the accumulation of precipitation within the secondary containment structure. The canopy will be supported by concrete footings which will extend below the frost line to prevent the effects of frost heave. The concrete apron in front of the storage area will be pitched away from the storage area to prevent stormwater from entering the secondary containment structure. The storage area will be inspected daily for leaking containers or accumulated liquids. Any accumulated liquids will be removed immediately by pumping, vacuuming or use of absorbents. Leaking containers will be repaired immediately. The floor slab will be provided with a continuous curb stop along its entire length to prevent containers from rolling backwards and consequently damaging the secondary containment structure or back wall of the canopy.

4.2 Handling of Ignitable, Reactive and Incompatible Wastes NR 640.06(2)(b)

Hazardous waste containers will be made or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired. Containers holding a hazardous waste which is incompatible with any wastes or other materials stored nearby in other containers will be separated from other wastes. Badger will take precautions to prevent the ignition of ignitable or reactive wastes to conform with NR 630.17. These procedures include the segregation of incompatible materials and separation of materials from ignition sources such as open flames, hot surfaces, friction heat, sparks, radiant heat, etc. To prevent sources of external ignition, explosion proof electrical equipment will be used in all ignitable storage areas. It is Badger's

policy not to allow smoking except in designated non-operational areas such as office areas. Badger has "No Smoking" signs in highly visible areas of the facility and main entrances.

4.3 Compliance with Buffer Zone Requirements NR 640.06 (2)c

Containers holding reactive or ignitable wastes are stored in the warehouse building in a storage location that is located 50 feet from the property line. Containers holding a hazardous waste which is incompatible with any waste or other materials stored nearby in other containers will be separated from other wastes. Incompatible wastes will be stored on separate containment pallets. Hazardous waste will not be placed in an unwashed container that previously held an incompatible waste or material or in a container that holds incompatible waste or material.

In the future Lab Pack building, incompatible wastes such as acids and caustics will be separated by dikes.

4.4 Operation and Maintenance Manual NR 640.06(2)(d)

A copy of Badger Disposal's Operations and Maintenance Manual is located in Appendix K.

4.5 Design Report and Closure Plan NR 640.06(2)(e)

4.5.1 Site Design

Design plans were prepared by RMT, Inc. and Graef, Anhalt and Schloemer. Plans and specifications, which include tank puncture calculations, erosion control, stress calculations, structural and stress calculations, sidewall and bottom structure and corrosion calculations and structural loading calculations, are located in Appendices P and Q.

4.5.2 Closure Plan

A copy of Badger Disposal's Closure Plan is located in Appendix J.

4.5.3 Financial Responsibility

Badger Disposal maintains an Irrevocable Letter of Credit for closure. The closure costs are updated on an annual basis and the Letter of Credit is adjusted accordingly. A copy of the most recent Letter of Credit is located in Appendix J.

4.6 Contingency Plan NR 640.06(2)(f)

A copy of Badger Disposal's Contingency Plan is located in Appendix I.

4.7 Air Emission Control Equipment NR 640.06(2)(h)

Drums and totes of hazardous waste that are received at Badger Disposal meet the applicable U.S. Department of Transportation regulations on packaging hazardous material for transportation. Containers are inspected when they arrive to make certain they are sealed and to make certain they remain closed when in storage. These procedures are being followed in accordance with NR 633.09. All containers are equipped with a cover and closure device that forms a continuous barrier over the container opening such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps or other open spaces into the interior of the containers. The containers are covered at all times when they are in storage. Sampling of containers and removal of container contents occurs through the bore holes on the drum lid via insertion of a drum pump. Liquid wastes are received and shipped out by tanker truck in a closed-loop operation that does not result in emissions. During truck loading and unloading operations, displaced vapor in the truck or storage tanks, respectively is vented back into whichever vessel is being emptied (i.e., either the truck or the tank). Transfer of hazardous waste in or out of a container using Container Level 2 controls will be conducted in a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive or other hazardous materials. Badger Disposal uses a submerged-fill pipe to load liquids into level 2 containers.

Whenever a hazardous waste is in a container using Container Level 2 controls, Badger Disposal will install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

1. Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:
 - a. In the case when the container is filled to the intended final level in one continuous operation, Badger Disposal will promptly secure the closure devices in the closed position and install all covers, as is applicable to the container, upon conclusion of the filling operation.
 - b. In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, Badger Disposal will promptly secure the closure

- devices in the closed position and install covers, as is applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
2. Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:
 - a. An empty container may be open to the atmosphere at any time.
 - b. In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container, Badger Disposal will promptly secure the closure devices in the closed position and install covers, as is applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
 3. Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste such as times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container.. Following completion of the activity, Badger Disposal will promptly secure the closure device in the closed position or reinstall the cover, as is applicable to the container.
 4. Spring loaded, pressure-vacuum relief valves, conservation vents or similar types of pressure relief devices which vent to the atmosphere will be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens will be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by Badger Disposal based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices or other requirements for the safe handling of flammable, ignitable, explosive, reactive or hazardous materials.

Badger Disposal will inspect containers using Container Level 2 controls and their covers and closure devices as follows:

1. In the case when a hazardous waste already is in the container at the time Badger Disposal first accepts possession of the container and the container is not emptied within 24 hours after the container arrives at our facility, Badger Disposal will visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, Badger Disposal will repair the defect.
2. In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, Badger Disposal will visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months to check for visible cracks, holes, gaps or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, Badger Disposal will repair the defect.
3. When a defect is detected for the container, cover or closure devices, Badger Disposal will make first efforts at repair of the defect no later than 24 hours after detection, and repair will be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste will be removed from the container and the container will not be used to manage hazardous waste until the defect is repaired.

4.8 Aisle Space Requirements NR 640.08

Badger Disposal maintains aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the facility operations in an emergency. Specific aisle spacing maintained at the Badger Disposal facility includes three-foot aisle spacing between rows of drums and at least six-foot wide aisles at all exit routes to all doorways.

The three-foot aisle spacing of hazardous waste drums allows direct access to each and every drum in case of emergency. It is Badger Disposal's policy to keep aisle ways clear at all times. The three-foot aisle spacing provides ample room to wheel the dolly down an aisle and remove a drum from any given row of drums.

4.9 Condition of Containers NR 640.09

Hazardous waste is managed in containers that are in good condition. If a container is not in good condition or begins to leak the hazardous waste in the container will be re containerized into a storage container that is in good condition.

4.10 Compatibility of Waste with Containers NR 640.10

All hazardous waste containers will be made with materials that will not react with and are otherwise compatible with the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired.

4.11 Management of Containers NR 640.11

Badger Disposal maintains an Operating Record that indicates the identity and the location of all hazardous wastes throughout their entire storage period. Containers holding hazardous waste are always closed during storage except for sampling and removal of waste. Containers are not opened, handled or stored in a manner which will rupture the container or cause it to leak.

4.12 Inspections NR 640.12

Badger Disposal inspects the container storage/process building on a daily basis to identify leaks and for deterioration of containers caused by corrosion or other factors. Copies of the Inspection Forms are provided in the Inspection Schedule located in Appendix E.

Storage in lugger boxes

The area used to store roll-off containers is shown on Plan Sheet 3 of 3 located in Attachment P of this submittal. The area will be designed to accept a maximum of six roll-off containers. Each roll-off will have approximate dimensions of 20 feet long by 7.5 feet wide by 3.5 feet high and will have approximate capacity of 20 cubic yards. The waste material stored in each roll-off will consist of solids and be of like chemical compatibility. Roll-offs of hazardous and nonhazardous wastes will be accepted from generators for storage and shipped off site for ultimate disposal under generic outgoing approvals. Badger Disposal will also be filling roll-offs and shipping them off site for ultimate disposal.

The roll-off container storage will be constructed as shown on Plan Sheet 3 of 3. The floor slab will be constructed of eight-inch thick reinforced concrete. The floor slab will be placed on an engineered backfill to minimize frost heave. The foundation (floor slab and footings) is adequate

to support the load of six roll-off containers filled to a maximum capacity (see structural loading calculations in Appendix Q).

SECTION 5
TANK SYSTEM STANDARDS
[Chapter NR 645]

5.1 Tank System Information NR 645.06 (1)(i)

The proposed facility expansion includes four – 12,000 gallon storage tanks in the Tank Farm, two – 5,500 gallon storage tanks in the Lab Pack Building and a 2,000 gallon fuel blending tank in the existing building. Tank information for the proposed tank system is located in Appendix K, Operation and Maintenance Manual, Section 3.

5.2 Secondary Containment System NR 645.06(1)(i)(7), NR 645.06(1)(i)(10) and NR 645.06 (2)(a)

The Tank Farm area has two containment areas. The first containment area is intended to contain any spillage from tank loading/unloading operations or from tank releases. This containment area is constructed of 12-inch wide and 42-inch high concrete walls and a concrete floor with a collection sump. The walls and floor of this containment area will be lined and coated to prevent failure owing to the pressure gradients, including static head and external hydrological forces, physical contact with products to which it is exposed, climatic conditions and the stress of daily operations, including stresses from nearby vehicular traffic.

The second containment area is intended to contain spillage from tanker loading/unloading operations. This containment area consists of a double sloped, lined, concrete loading/unloading pad with a center collection sump and trench. All piping and ancillary equipment, including filters, are included within the concrete containment.

The Tank Farm containment areas provide containment capacities of over 20,760 gallons for tank spillage and 1,590 gallons for the tanker loading/unloading area. Tank farm containment volume calculations are located in Appendix H of this submittal.

Each of the two 5,500-gallon aboveground storage tanks located in the lab pack building also have two containment areas. The first containment area is intended to contain any spillage from drum unloading operations or from tank releases. The containment areas for each tank are constructed of 12-inch wide by 54-inch high concrete walls and a concrete floor. The walls and floor of these containment areas will be lined and coated to prevent failure owing to pressure gradients, including static head and external hydrological forces, physical contact with products to which it is exposed, climatic conditions and the stress of daily operations. Each of these containment areas provides a containment capacity of over 5,640 gallons.

The second containment area is intended to contain spillage from drum unloading operations. These containment areas are constructed of 6-inch wide by 6-inch high concrete dikes and a concrete floor. Each of these containment areas provide a containment capacity of over 55-gallons. Supporting calculations for the secondary containment volumes are provided in the Preparedness and Prevention Plan, which is included as Appendix H.

Piping and associated equipment at the Badger Disposal complex is located above ground and provided with secondary containment, as appropriate. Yard (overhead transfer) piping is situated in a secondary containment piping system equipped with integral leak detection. If a pipe, flange or valve leaks, it would be easily identified and completely contained, avoiding any risk to the environment while repairs are undertaken. Additionally, this ancillary equipment (flanges, valves, pumps, etc.) will be regularly monitored and inspected for leaks, further reducing the threat of releases from defective equipment.

Because Badger Disposal's tank farm and loading/unloading pad is located outdoors, Badger Disposal has designed a canopy to cover these areas. In the unlikely event that excess amounts of water or snow accumulates in the outside storage areas, Badger Disposal will remove any excess accumulation from the containment systems via portable pumps. Badger Disposal will then manage the accumulated precipitation in one or more of the following ways:

- Pump the excess precipitation into a process tank for processing into waste fuel products.

- Conduct analytical testing for disposal at an appropriate disposal facility.
- Conduct analytical testing for approval from the Sewer Department for discharge to the Milwaukee sewer system.

5.3 Handling of Ignitable, Reactive and Incompatible Wastes NR 645.06(1)(i)(11) and NR 645.06(2)(b)

Storage tanks will not be used to store reactive or incompatible wastes. Ignitable waste will be stored in the four tanks located in the tank farm. These tanks are constructed of carbon steel. Explosion-proof pumps are used for transferring ignitable wastes from bulk tankers. Bottom unloading of bulk tankers is normally utilized to minimize the threat of fire or explosion, and to facilitate the use of the vapor balance system. A static grounding system is also utilized within all areas to minimize the threat of fire. Future provision will allow for fire pull stations in the vicinity of the loading/unloading operations to further enhance the fire communications system. The Tank Farm is depicted in drawings enclosed and includes tanks 1-4. Tanks 1-4 are typically used for blended fuel storage while the process tank will be typically used for blending. All tanks are designed in accordance with appropriate codes and regulations to safely store and blend ignitable materials. Each individual tank includes an external fire valve operated by a fusible link and pressure/vacuum relief valve to minimize the potential for flame propagation. The tanks located in the lab pack building will be designed to be compatible with materials stored within.

Smoking or open flames will not be allowed in the tank farm area. No smoking signs will be posted throughout the facility.

5.4 Compliance with Buffer Zone Requirements NR 645.06(2)(c)

Sheet 2 of 18 in Appendix P shows compliance with the setback requirements for the hazardous waste storage tanks.

5.5 Operation and Maintenance Manual NR 645.06(2)(d)

A copy of Badger Disposal's Operation and Maintenance Manual is located in Appendix K.

5.6 Design Report and Closure Plan NR 645.06(2)(e)

5.6.1 Site Design

Design specifications for the tank management area are located in Appendix K as well as Appendix Q.

5.6.2 Closure Plan

A Closure Plan for the Tank Management area is located in Appendix J.

5.6.3 Financial Responsibility

Badger Disposal maintains a letter of credit as the financial mechanism for closure. The closure cost for the facility is updated on an annual basis. A copy of the most recent letter of credit is included in appendix J.

5.7 **Contingency Plan NR 645.06(2)(f)**

A copy of Badger Disposal's Contingency Plan is located in Appendix I.

5.8 **General Operating Requirements NR 645.10**

Hazardous wastes will not be placed in a tank system if they could cause the tank, its ancillary equipment or the secondary containment system to rupture, leak, corrode or to otherwise fail.

Badger Disposal will use appropriate controls and practices to prevent spills and overflows from tank or secondary containment systems. These include:

- Drip pans or containers are placed beneath all hose connections and valves during loading and unloading.
- All loading/unloading areas at the complex will be designed with reinforced concrete pads and containment ramps with integral curbing to prevent run-off and to contain any accidental release which may occur. Each loading/unloading area is sufficiently impervious to prevent leakage to the surroundings. The bulk tanker loading/unloading area will also be covered by a canopy to minimize any potential run-on from precipitation events.
- The Loading/Unloading pad will include a collection sump. Additionally, any pumps used for loading/unloading operations will be located within the containment area, or will be provided with individual secondary containment. The Loading/Unloading pad includes a double sloped lined concrete pad with a center collection sump and trench. All piping and ancillary equipment are included within the concrete containment.
- A high level alarm is integrated into the design of the tanks with an automatic cut-off system for the feed pumps, thereby providing overfill protection. The automatic pump cut-off system operates using non contact ultrasonic level sensors which, when detecting high liquid level, open a fail safe contact which interrupts power to the feed pumps, thus preventing any further conveyance of materials into the tank.

- Secondary containment systems for all of the tanks are inspected visually to detect liquid.

Section 5.10 of this submittal outlines the procedures if a leak or spill occurs in the tank system.

Badger Disposal maintains a written operating record which contains the identity and location of all stored hazardous waste throughout the entire storage period.

Section 2.9 of this submittal addresses general requirements for ignitable, reactive or incompatible wastes.

All hazardous waste placed in a tank or tank system will be managed in accordance with the requirements of NR 633.07.

5.9 Inspections NR 645.11

All tanks and piping used by Badger Disposal are located above ground, and tanks are ultrasonically tested as deemed necessary to ensure each tank's structural integrity. All tanks used for blending, inbound storage and product storage are constructed of carbon steel. All tanks are grounded and painted to further reduce the potential for corrosion. The pH of the materials in each tank is determined as necessary. Materials used for construction of the tank systems are compatible with the materials accepted at the Badger Disposal complex. Inspection of all tanks at the Badger Disposal complex will be carried out in accordance with 40 CFR 264.15 and includes tanks, containments, and ancillary equipment. A copy of the inspection log is outlined in detail in the Inspection Section of this application. Badger Disposal will inspect all the tank systems daily to detect corrosion or the release of waste, as well as areas immediately surrounding the externally accessible portion of the tank system, including secondary containment, to detect corrosion or signs of release of hazardous wastes (i.e. wet spots). Notations of the observations made will be recorded along with the date, time, and name of the inspector. Any deficiencies identified during the inspection will be so noted in the inspection log along with the date and nature of the corrective action taken.

5.10 Response to Leaks or Spills NR 645.12

5.10.1 Cessation of Use

If a release occurs from the tank system or secondary containment system Badger Disposal will immediately stop the flow of hazardous waste into the tank system or secondary containment system to determine the cause of the release.

5.10.2 Removal of Waste

If a release occurs from the tank system, Badger Disposal will, within 24 hours after detection of the leak, remove as much of the waste as is necessary to prevent further release of hazardous waste into the environment and to allow inspection and repair of the tank system.

If the material released was to a secondary containment system, all of the released material will be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

5.10.3 Containment of Releases To The Environment

Badger Disposal will immediately conduct a visual inspection of the release and, based upon that inspection:

- Prevent further migration of the leak or spills to soils or to surface water
- Remove, and properly dispose of, any visible contamination of the soil or surface water

5.10.4 Notification of Reports

Any release to the environment will be reported by Badger Disposal to the WIDNR within 24 hours of its detection. Within 30 days of detection of a release to the environment, Badger Disposal will submit a report to the department containing the following information:

- The likely route of migration of the release
- Characteristics of the surrounding soil, including soil composition, geology, hydrogeology and climate
- Results of any monitoring or sampling conducted in connection with the release, if available. If sampling or monitoring data relating to the release are not available within 30 days, this data will be submitted to the department as soon as available

- Proximity to downgradient drinking water, surface water and populated areas
- Description of response actions taken or planned

5.10.5 Provision of Secondary Containment, Repair or closure

If the release has damaged the integrity of the tank system beyond repair, the tank system will be closed. If the cause of the release was a release from the tank into the secondary containment system, the tank system will be repaired prior to returning the tank system to service.

5.10.6 Certification of Extensive Repairs

If Badger Disposal has repaired the tank system and the repair has been extensive, the tank system will not be returned to service until Badger Disposal has obtained a certification by an independent, qualified, registered engineer that the repaired tank system is capable of handling hazardous wastes without release for the intended life of the tank system. This certification will be submitted to the WIDNR within 7 days after returning the tank system to use.

5.11 **Waste Analysis and Trial Tests NR 645.15**

Whenever a tank system is to be used to store a hazardous waste that is substantially different from waste previously stored, Badger Disposal will conduct waste analyses and trial tests or obtain written, documented information on similar waste to show that the materials are compatible with the tank.

Hazardous wastes or treatment reagents will not be placed in a tank system if they could cause the tank, its ancillary equipment or the secondary containment system to rupture, leak, corrode or to otherwise fail.

6.3 General Contents of FPOR NR 680.06 (3)

6.3.1 General Facility Description and Part A Application

Badger Disposal is a commercial recycling complex for waste solvents, paints, sludges and various other organic and inorganic materials. Badger Disposal's operations consist of various processes for recovering, re-packing, reclaiming and fuel blending organic materials generated by a wide variety of industries located throughout the United States. The fuel blending operations are exempt from the requirements of NR 630 through 685.

A copy of Badger Disposal's Part A Application is located in Appendix A.

6.3.2 Chemical and Physical Analyses of Wastes

Chemical and physical analyses of the hazardous waste and hazardous debris managed at Badger Disposal is detailed in the facility Waste Analysis Plan. A copy of the Waste Analysis Plan is located in Appendix D.

6.3.3 Waste Analysis Plan

A copy of Badger Disposal's Waste Analysis Plan is located in Appendix D.

6.3.4 Security Procedures & Equipment

Security Procedures and Equipment are detailed in Section 2.6 of this submittal.

6.3.5 General Inspection Schedule

A copy of Badger Disposal's Inspection Schedule is located in Appendix E.

6.3.6 Procedures and Equipment Used to Prevent Hazards

Procedures and equipment used to prevent hazards are detailed in the Contingency Plan which is located in Appendix I.

6.3.7 Precautions to Prevent Accidental Ignition or Reaction of Wastes

Containers holding reactive and incompatible wastes are stored in the warehouse building in a storage location that is located 50 feet from the property line. Badger will take precautions to prevent the ignition of ignitable or reactive wastes to conform with NR 630.17. These procedures include the segregation of incompatible materials and separation of materials from ignition sources such as open flames, hot surfaces, friction heat, sparks, radiant heat, etc. To prevent sources of external ignition, explosion proof electrical equipment will be used in all ignitable storage areas. It is Badger's policy not to allow smoking except in designated non-operational areas such as office areas. Badger has "No Smoking" signs in highly visible areas of the facility and main entrances.

6.3.8 Vicinity and Site Traffic Patterns

Vicinity and Site Traffic Patterns are detailed in Section 3.1.6 of this submittal.

6.3.9 Facility Location Information

Facility location information is detailed in Section 2.10 of this submittal.

6.3.10 Training Program

A copy of Badger Disposal's Training Program is located in Appendix F.

6.4 **Facility Specific Requirements NR 680.06 (4)**

Container requirements, as specified in NR 640 are located in Sections 3 and 4 of this submittal. Tank system requirements, as specified in NR 645, are located in Sections 3 and 5 of this submittal.

6.5 **Environmental Review NR 680.06 (6)**

A copy of Badger Disposal's Environmental Review is located in Appendix N.

6.6 **Needs NR 680.06 (8)**

Badger Disposal has submitted this Feasibility Report and Plan of Operation (FRPO) to WDNR for review as required by Wisconsin Statutes, chapter 144. This Statement of Needs includes a statement explaining the need for approval of the Badger Disposal facility and the hardships which might result without Badger Disposal's services to its clientele.

The most direct means of recycling is by re-directing unwanted products to people who can use them. Companies often buy too much of a certain product or change their manufacturing process and no longer need that product. Used oil and other recyclable materials eventually become so old that they are unusable for their intended purposes. It is time consuming and costly for a company to individually find a user outside of their organization for these unwanted or off-spec products. These companies usually find that disposal of these unwanted products is much more cost effective. Badger Disposal has nationwide contacts with industries which have specific product needs and any of these unwanted products can fulfill the needs of these other users.

Some materials simply cannot be recycled because they either have no reclamation value or a user cannot be located within a reasonable amount of time. In these cases, fortunately, the recycling process is not limited to reuse. These waste materials can become resources for "co-processing". Co-processing is any manufacturing process which uses waste materials in either a single or combined operation to produce a product. Cement manufacturing is one of the largest co-processing industries. Organic liquid wastes replace nonrenewable fossil fuels as the energy source for kiln operation. Wastewaters are used for cooling and make-up water in the cement making process. Wastes used in co-processing not only contribute to the production of an essential product, but conserve natural resources. Co-processing has been hailed by the EPA as one of the most viable waste recycling technologies in existence today.

Based on the State of Wisconsin Hazardous Waste Capacity Assurance Plan (October, 1989), Wisconsin has a limited number of in-state commercial hazardous waste management facilities. These facilities are primarily involved in solvent reclamation. A limited number of liquid incineration and aqueous inorganic treatment also takes place in Wisconsin. As a result, Wisconsin has a shortfall in hazardous waste management capacity.

In the future, competition for remaining hazardous waste landfill space is expected to increase. Correspondingly, disposal costs will also increase. The activities conducted at Badger Disposal's facility are based on the objective of redirecting materials from waste streams for the purpose of beneficial use whenever possible, thus reducing the amount of wastes disposed in landfills.

Waste disposal costs continue to rise nationally as Congress expands the list of wastes which are restricted from land disposal and as waste capacity continues to decrease.

The purpose of Badger Disposal's facility is to re-direct waste streams for the purpose of beneficial re-use whenever possible. The recycling of most of the materials which are handled at

Badger Disposal is most cost effective when managed in bulk quantities. The materials received at Badger Disposal are primarily generated by commercial, institutional and industrial companies which do not generate bulk quantities. Currently, these wastes are often solidified and disposed of in landfills. Much of this waste can be diverted from landfills and incinerators into various recycling processes or beneficial reuse products. The purpose of Badger Disposal's reclamation, bulking and fuel blending facility is to collect and direct both nonhazardous and hazardous wastes into recycling processes. This presents a very attractive alternative to disposing these waste in landfills or for the high costs of incineration.

Badger Disposal strives to seek more sophisticated and economical means of servicing the hazardous waste management industry. As process equipment improves, as Congress expands the list of wastes restricted from land disposal, and as Badger Disposal's existing and future clientele's waste needs evolve and expand, Badger Disposal must upgrade its facility to remain responsive and competitive, and continue providing an environmentally acceptable and secure means of recycling and/or processing nonhazardous and hazardous wastes.

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SECTION 7 CURRENT FACILITY OPERATIONS

Facility Site Description

Badger Disposal currently operates out of two locations: 5611 West Hemlock Street, Milwaukee, WI and 5609 West Hemlock Street, Milwaukee, WI. These buildings are shown on the Current Operations drawing #05490-OV1 located in Attachment B of this section. The building located at 5609 West Hemlock Street, Milwaukee, WI is a warehouse which Badger began leasing from Megal Construction on July 1, 2006. This building consists of a 6,000 square foot licensed solid waste storage area and 500 square feet of offices. The warehouse space is constructed of 12-inch thick outside walls and 6-inch thick inside walls. On July 13, 2006 Badger Disposal received a Solid Waste Storage Facility <50 tons/day license at this location for storage and transfer of solid waste, license #4391. This facility only accepts non hazardous wastes, both solids and liquids. 3.5 inch high concrete berms have been constructed on the inside of the warehouse at all docks and doorways, the berms and floor have been sealed with an impervious coating. As shown on the Traffic Pattern Plan drawing #05490-T1 located in Appendix B of this section, solid wastes are received and shipped out of Dock 5 located at the back of the building. Dock 4 which is located in the front of the building is specifically designed for shipping out 20 cubic yard roll-off boxes which have been filled with solid waste.

The location at 5611 West Hemlock Street, Milwaukee, WI is a licensed hazardous and solid waste storage facility within an existing building which consists of an 11,000 square foot licensed storage area and other non-regulated areas such as a laboratory, reception area and administrative offices. A current drum storage plan drawing #05490-D1 for this building is located in Attachment B of this section. This building is constructed to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents into the air, soil or surface water which could threaten human health or the environment. All containment areas are designed in accordance with the requirements of WAC NR 664.0175. The warehouse building is constructed of 12-inch thick outside walls and 6-inch thick inside walls. All exit doors are curbed, dike walls are constructed 6-inches high and 10-inches thick. The floor of the container storage area has been sealed with an impervious coating. A 4 hour rated fire wall has been constructed with two automatic fire doors and frames one on the east side of the firewall the other on the west side of the firewall. As an integral part of the fire wall, the fire doors automatically close if excessive heat is detected, isolating the process/storage portions of the building from the laboratory and office area. An AFFF fire suppression system has been installed with individual sprinkler heads located throughout the ceiling of the warehouse.

Building Addition

Badger Disposal began construction of a 6,000 square foot addition to the existing warehouse building on April 8, 2007. The addition was completed November 12, 2007. Megal Development Corporation constructed the addition, Brian Cooley & Associates, LLC is the architectural firm that designed the addition. This building addition will allow for storage of a combination of up to 492 fifty-five gallon containers of non-ignitable waste and up to 984 fifty-five gallon containers of non-ignitable nonhazardous waste. This addition was built per architectural drawings A-3.0, A-4.0, S-2.0, S-1.1, S-1.2, S-1.3, S-2.0, S-2.1 and 2-2.2 from Brian Cooley & Associates, LLC. Copies of these drawings are located in Attachment B of this section. A current drum storage plan drawing #05490-D1 (revised) is located in Attachment B of this section.

This addition has been designed, constructed, and will be maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment. The North wall of the addition has been constructed to provide a 4-hour fire separation from the existing building with a 3- hour roll up fire door. The West wall has been constructed as a 3- hour fire wall, the South wall as a 1- hour fire wall. A wet fire sprinkling system with foam concentration has been installed with sprinkler heads throughout the warehouse.

The addition is designed to provide environmentally safe storage for all containerized materials. The building is designed with 8" thick walls and reinforced concrete floors. On October 13, 2007 the container storage area was sealed with an impervious coating supplied and installed by Parker Coatings, Inc. The floor was acid etched, cleaned and then rinsed with water. The expansion joints were cleaned out and filled with Parker NP-829 flexible crack filler. The floor sealant is CHEMSEAL 1015-WRU a wear resistant urethane. This sealant was applied in two coats with rollers. 45 gallons of sealant was used on the job. The floor area sealed is 6,000 S.F. The dried sealer is 8 mils. thick. The floor will be inspected by Parker Coatings, Inc. semi-annually and repaired as necessary.

The addition is designed with concrete curbing at entrances to the building to minimize the risk of any accidental spillage leaving the confines of the building. The curbing, walls and floors are designed to meet the requirements of WAC NR 664.0175 and are sufficiently level to ensure the integrity of the containment. There are no sewer discharges located in any operational or storage areas of the building. 3 ½ inch high containment ramps were installed providing containment capacity of 12,149 gallons, or 6,737 gallons when storage is at capacity with 66 containment pallets. Run-on is not a concern within the building addition in that it is entirely enclosed. The addition is designed and operated so that leaked or spilled material within any area can be easily

identified and cleaned up to prevent containers from coming in contact with standing water or potential leaks from surrounding containers.

Containers managed in the storage area include drums in various sizes such as 5, 10, 14, 20, 30, 55 and 85 gallon, 275 gallon totes and cubic yard bags and boxes. Solid containers and lab packs are stored two high, liquids are stored on a single level. When storing containers two high, containers of equal or larger size or quantity will be stored on the bottom level. When containers greater than 20 gallons in size are stored 2 high, pallets will be used to separate the first level from the second level. Containers of hazardous waste liquids and lab pack drums will be placed on spill pallets. Placards will be used to clearly identify the separate storage areas for the different types of hazardous wastes stored. Storage of acids and bases will be separated by the containment curb. Acids will be stored in Section B and Bases will be stored in Section A. Only compatible wastes will be stored in the addition. For example, heavy metal liquids or solids can be stored with either acids or bases. Non-reactive F006-F019 solids/sludges will be stored with bases. Non-ignitable hazardous Soils/debris with F002-F005 waste codes can be stored in either section. Toxic organic and inorganic waste can be stored in either section. Only non-reactive and non-ignitable waste will be stored in either section due to the close proximity of the property line.

Badger Disposal will maintain three foot aisle spacing between rows of drums to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment in an emergency. Lines will be clearly marked on the floor to delineate the rows of containers from the aisles. Inspections will be completed as outlined in the Inspection Schedule, Appendix E of the FPOR.

Activities that take place in this addition are storage, lab packing and bulking. Acids and bases are bulked from 55 gallon drums into totes or a 6,000 gallon tanker and shipped off site for neutralization and chemical treatment. Once truckload quantities of acids or bases are accumulated, Badger Disposal contracts with a fully licensed transporter to bring in a 6,000 gallon tanker truck. Badger Disposal only uses empty tanker trucks for its bulking activities. Each tanker is checked upon arrival, if the tanker contains residue it is sent back. Every tanker driver has a copy of the last hauled manifest with the trailer, upon arrival at the facility the waste codes from the last hauled manifest are compared to the waste codes for the containers to be pumped to insure compatibility. Drums from Section B will be pumped from within section B, drums from Section A will be pumped from within section A. The vacuum tanker truck loads from Dock 3 located on the southeastern corner of the building addition. The truck trailer is backed over the berm and loaded inside of the building.

Upon arrival, the tanker truck will back over to Dock 3 for inspection. Badger Disposal personnel inspect the integrity of the truck as well as the condition of the tanker pump, filter,

from Dock#3 located on the southeastern corner of the building addition. The truck trailer is backed over the berm and loaded inside of the building.

Upon arrival, the tanker truck will back over to Dock#3 for inspection. Badger Disposal personnel inspect the integrity of the truck as well as the condition of the tanker pump, filter, hoses and complete and sign a Tanker Truck and Loading Area Inspection Log. During this inspection the warehouse containment integrity is also inspected for leaks, cracks and cleanliness. Once the inspection is completed the trailer is backed into the warehouse for loading. Badger Disposal process personnel put on appropriate safety equipment which includes respirators, safety glasses, safety shoes, gloves and tyvek suits during the drum pumping operations.

A wand is connected to the trailer hose, the bung hole of the drum is opened, the wand is inserted and the drum is vacuumed empty. The bung is put back onto the drum and the empty drum is moved to a storage trailer where it will be shipped off site for reclamation. All drums are pumped from inside of the bermed warehouse area. A liquid level control on the trailer indicates when the trailer is full. A sample of the tanker material is obtained for quality control purposes. The tanker trailer is inspected to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking. An outgoing manifest is signed and the tractor trailer leaves Badger Disposal.

7.4 2009 Lab Pack Building

On October 22, 2008 Badger Disposal purchased a building located at 5621 West Hemlock Street, Milwaukee, WI. This building will be utilized for lab pack storage and it will be referred to in this document as the 2009 Lab Pack Building. This property is contiguous to the property owned at 5611 W. Hemlock Street, Milwaukee, WI. On May 22, 2009 Edgewood Surveying completed a new survey that combined both properties into one. The address for these combined properties is now 5611 W. Hemlock Street, Milwaukee WI. A copy of this new survey is located in Attachment B of this section.

The 2009 Lab Pack Building consists of a 7,000 square foot licensed solid waste storage area and 8,000 square feet of offices. On August 21, 2009 Badger Disposal submitted a modification to the WIDNR to allow for storage of 18,975 gallons or 345 fifty-five gallon containers, or their equivalents, of hazardous waste in 3,500 square feet of this Lab Pack Building. Lab Pack storage was previously approved for a new Lab pack Building in our Final Determination to Conditionally Approve a Feasibility and Plan of Operation Report for a Hazardous Waste Treatment and Storage Facility (dated June 29, 2007). The Lab Pack storage area for the new warehouse is identified as section A on the 2009 Lab Pack Bldg. Drum Storage Plan #05490-D2. Section B on drawing #05490-D2 is for solid waste storage.

Badger Disposal began a retrofit of this warehouse space on March 16, 2009. Brian Cooley & Associates, LLC is the architectural firm that designed the retrofit. This retrofit is built per architectural drawings A-01, A-1.0, A-2.0, A-3.0, A-3.1, A-3.2, A-3.3, S-1.1, S-3.0, S-3.1 and S-4.0 from Brian Cooley & Associates, LLC. Copies of these drawings are located in Attachment B of this section.

The building retrofit is designed to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents into the air, soil or surface water which could threaten human health or the environment. A 2- hour rated fire wall with three automatic fire doors and frames exists on the north side of the warehouse. As an integral part of the fire wall, the fire doors automatically close if excessive heat is detected, isolating the storage portions of the building from the office area. A 2- hour rated fire wall is located on the east and west side of the building for proper separation requirements between the North Drum Storage Warehouse and the 2009 Lab Pack Building. A wet fire sprinkling system with foam concentration has been installed with sprinkler heads throughout the warehouse. The fire protection system was designed and installed by United States Fire Protection as detailed in their design drawing No. 401593-FP1, dated 2-4-2009.

The lab pack storage area is classified as hazardous occupancy; therefore, all electrical wiring will comply with state and NEC 2008 codes, Art. 501, Class 1, Divisions I and II. In accordance with these code requirements, explosion- proof lighting has been installed throughout the lab pack storage area. The existing non-rated electrical service has been relocated to the outside of the building.

The heating and ventilating for the 2009 Lab Pack Building was designed and certified by Bruce Griffin, P.E. and DR Kohlman, Inc. (Dwg. No. HV-1, dated 1-15-09). Building heat is provided by an oil boiler that burns on-spec oil.

The retrofit is designed to provide environmentally safe storage for all containerized materials. The concrete floor has been sealed with an impervious coating supplied and installed by Parker Coatings, Inc. The floor was acid etched, cleaned and then rinsed with water. The expansion joints were cleaned out and filled with NP-1 flexible crack filler. The floor sealant is CHEMSEAL 1015-WRU a wear resistant urethane, which was applied at 8 mils dry film thickness (DFT). The floor will be inspected by Parker Coatings, Inc. semi-annually and repaired as necessary.

An alarm system has been installed which includes four fire alarm pull stations and four emergency strobe lights. Fire extinguishers and emergency exit lights have also been installed.

The warehouse retrofit is designed with concrete curbing at entrances to the warehouse to minimize the risk of any accidental spillage leaving the confines of the building. The curbing, walls and floors are designed to meet the requirements of WAC NR 664.0175 and are sufficiently level to ensure the integrity of the containment. There are no sewer discharges located in any operational or storage areas of the building. 4 in high containment ramps were installed providing containment capacity of 6,573 gallons. Containment calculations are located in the Preparedness and Prevention Plan – Appendix H of the approved Feasibility and Plan of Operation Report. Run-on is not a concern within the warehouse in that it is entirely enclosed. .

Containers managed in the storage area include drums in various sizes such as 5, 10, 15, 20, 30, 55 and 85 gallon, and cubic yard bags and boxes. Solid lab packs are stored two high, and liquids are stored on a single level. Lab packs will be stored on wooden pallets for the exception of incompatibles such as oxidizers, water reactives, spontaneously combustibles, reactive cyanides and organic peroxides, which will be segregated and stored on containment pallets. When storing containers two high, containers of equal or larger size or quantity will be stored on the bottom level. When containers greater than 20 gallons in size are stored 2 high, pallets will be used to separate the first level from the second level. Lab packs received will include flammable liquids and solids, combustibles, corrosives, oxidizers, organic peroxides as well as toxic liquids and solids. Placards will be used to clearly identify the separate storage areas for the different types of hazardous wastes stored. Storage of hazardous wastes will be separated from non-hazardous wastes by a containment curb running through the middle of the warehouse. Badger Disposal will only accept lab packs bearing the waste codes listed in Badger Disposal's Part A Application signed and dated July 31, 2009. A drum storage plan for this building (drawing #05490-D2) is located in Attachment B of this section.

Badger Disposal will maintain three-foot aisle spacing between rows of containers to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment in an emergency. Lines will be clearly marked on the floor to delineate the rows of containers from the aisles. Inspections will be completed as outlined in the Inspection Schedule, Appendix E of the FPOR. This allows easy access to containers so spills can be easily detected and cleaned up.

An enclosure is being built to connect the North Drum Storage Warehouse building to the 2009 Lab Pack Building. An additional dock (Dock #5) is being constructed on the north side of this enclosure adjacent to loading Dock #1. This enclosure and dock are shown on Badger Disposal Current Operations drawing #05490-OV1. An opening on the west wall of the North Drum Storage Warehouse will allow for drum movement between both buildings. Drawing A3.3 shows the traffic pattern of hazardous waste containers from Dock #5 to the lab pack storage area. 4 inch high concrete containment berms will be installed at the doorways to minimize the risk of any accidental spillage leaving the confines of the loading dock enclosure. The concrete floor in

the enclosure will be sealed with an impervious coating. Available spill control equipment will include absorbent materials, brooms and shovels. Fire rated doors, a foam fire suppression system and fire extinguishers will be installed as well as explosion proof lighting and alarms.

An overhead door has been installed on the south west corner of the 2009 Lab Pack Building (Dock #4). 4- inch drive over containment berms and curbing have been installed on a 12' x 20'6" section of the concrete pad at Dock #4 to provide secondary containment during loading and unloading of hazardous waste containers. Drawing #05490-D2 (revised 11/5/09) shows this containment area. Concrete joints will be caulked and the entire containment area will be sealed with an impervious coating. Containment in this area is approximately 300 gallons, which is sufficient for the largest container that will be off loaded.. Any accumulated liquids in the containment are will be tested only if there is evidence of a spill or release. Trucks will back up to the drive over berm and hazardous waste containers will be off loaded within the containment area.

A portable ramp will be utilized for receiving non hazardous containers until the future Dock #5 enclosure is completed.

Activities that take place in the 2009 Lab Pack Building are solid waste storage and bulking as well as lab packing. As shown on the Traffic Pattern Plan drawing #05490-T1, located in Appendix B of this section, solid wastes are received and shipped out of Dock #4 located on the west side of the building as well as the future Dock #5. Dock #4 is also designed for shipping out 20-cubic yard roll-off boxes which have been filled with solid waste. Lab packs will be received and shipped out of Dock#4 and Dock#5.

7.5 Lab Packing Operations

The current lab pack re-packaging operations allow Badger Disposal the capability of re-packaging containers of compatible laboratory chemicals for off-site shipment to permitted Treatment Storage and Disposal Facilities (TSDF). The lab packing operations take place in the North Drum Storage Warehouse, the 2007 Warehouse Addition as well as the 2009 Lab Pack Building. Badger Disposal has set up separate lab pack storage and repack areas that have distinct boundaries and are marked with yellow painted lines. The hazard class of the material in each storage/repack area is clearly communicated by hazardous materials placards corresponding to the materials that are presently in that storage/repack area. The storage areas are located on the north side and the southwest corner of the North Drum Storage Warehouse, the northwest side of Section B and south east side of Section A in the 2007 Warehouse Addition and Section A in the 2009 Lab Pack Building.

As lab packs are received in 5, 10, 15, 20, 30 and 55-gallon containers, as well as All-Pak boxes, they are placed in appropriately designated storage/repack areas. They are then depacked and repackaged into larger containers. Lab packs are only re-packed by facility Chemists. The Chemist reviews the inventory sheet and compares it to the actual contents of the lab pack, and then, based upon his determination of what containers can be repacked together, the Chemist begins the repackaging. Containers in the lab packs are combined with other containers that have similar hazard classes in the lab packs without opening any of the containers. The contents of the containers in the lab packs are not combined with any of the containers. Once a lab pack is full it is shipped off-site to a fully licensed TSDF.

7.6 Bulking Activities

Bulking activities are conducted in the North Drum Storage Warehouse and the 2007 Warehouse Addition. Bulking in the North Drum Storage Warehouse takes place in the repack area on the northeast end of the building. Wastes are received in 5 gallon pails, 15 gallon drums, 30 gallon drums, 55 gallon drums and cubic yard boxes as loose pack waste streams. These containers are then bulked into larger containers such as 55 gallon drums or totes. These loose packs are of like materials with identical waste codes. Badger Disposal does not bulk oxidizers, toxic liquids/solids or poisons. Once bulked the drums and/or totes are either shipped off-site for disposal or if a candidate for fuel blending, pumped into an outgoing fuel blend tanker. After the drums are RCRA emptied, they are crushed or sent off site for recycling. Empty cubic yard boxes are discarded.

Other materials that are bulked include solid rags and absorbents that are bulked into cubic yard boxes and shipped off site for fuel blending. A liner is placed within the cubic yard box. The emptying of the drums of solids into cubic yard boxes is accomplished by means of a drum tipping unit attached to a fork lift which dumps the materials into the cubic yard box. Only DOT approved shipping containers are utilized for this operation. Only organic solids with little or no volatility and inorganic solids are bulked.

Acids and bases are bulked in the 2007 Ware House Addition from 55 gallon drums into totes or a tanker and shipped off site for neutralization and chemical treatment. Transfer of hazardous waste from drums into totes is conducted in a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices of handling flammable, ignitable, explosive, reactive or other hazardous materials. Badger Disposal uses a submerged-fill pipe to load liquids into totes.

Batteries and pcb capacitors and ballasts are also bulked from small containers to large containers for more economical disposal options. Paint cans/pails are shipped into Badger

Disposal in various sized containers such as 30 gallon drums, 55 gallon drums and cubic yard boxes. The cans and pails are emptied into 55 gallon drums. If pumpable the drums are shipped out in a fuel blend tanker. If not pumpable they are shipped off-site in drums for fuel blending.

7.7 Fuel Blending Activities

On August 23, 1996 Badger Disposal of WL, Inc. (dba EOG Disposal, Inc.) received a Conditional Approval for Legitimate Recycling Exemption – Hazardous Waste Burned for Energy Recovery/Fuel Blending and Marketing Activities. On June 14, 2006 Badger Disposal of WL, Inc. received a notice from the WIDNR that as of August 1, 2006, the recycling exemption in ch. NR 625 would no longer exist and that commercial fuel blending activities would be subject to full hazardous waste treatment facility requirements, including licensing. On July 10, 2006 Badger Disposal applied for a temporary authorization to continue its fuel blending activities. On August 15, 2006 Badger Disposal received a 6 month temporary authorization to continue its fuel blending activities. On February 6, 2007 another 6-month temporary authorization approval for the fuel blending activities was received from the WIDNR. On July 26, 2007 a Hazardous Waste Treatment-Container Commercial License was issued to Badger Disposal

In order to comply with the new standards Badger Disposal implemented certain procedural changes. Previously, fuel blending activities occurred at Dock#1 on the northwestern corner of the North Drum Storage Warehouse. This operation was moved to inside of the existing storage building at Dock#2 located on the southeastern corner. The truck trailer is backed over the berm for pumping, the tractor remains outside of the building.

Additional inspection requirements have been implemented that include a more extensive written inspection of the tanker truck and loading area. A new Tanker Truck and Loading Area Inspection Log has been designed and is included in Appendix A of Badger Disposal's Inspection Schedule.

The purpose of Badger Disposal's fuel blending activities is to collect and direct both nonhazardous and hazardous wastes into recycling processes. The first step in our fuel blending process is to determine that a generators waste stream is suitable for fuel blending. This is accomplished by requiring the generator or broker to complete a Waste Profile form with Generator Information, Waste Description, General Characteristics, RCRA information, Viscosity, % water, Total Suspended Solids, pH, BTU's, Flash Point, Halogens, Hazardous Characteristics and other components, Chemical Composition and Metals information. The profile data is reviewed by Badger Disposal's General Manager who determines whether the stream is fuel blendable. An example of a candidate stream would be one with a BTU value of >5,000, water content of 0-30% , halogens of 0-20% and flash point of <140F. Once the profile

has been classified as acceptable for the fuels program, an approval letter is sent to the generator. Upon completion of the approval process, the waste is shipped to Badger Disposal.

Wastes are received in various container sizes such as 5 gallon pails, 10 gallon pails, 15 gallon drums, 30 gallon drums, 55 gallon drums and 275 gallon totes. Upon receipt at Badger Disposal, 10% of each waste stream destined for fuel blending is sampled and analyzed for BTU's, Halogens, %Water, %Solids, ph and flash point. The analysis is matched to the information provided on the Waste Profile form. If all of the information matches, the drums are moved into appropriate storage locations. If the information does not match, the generator is contacted and an amended profile is required.

Once truckload quantities are accumulated, Badger Disposal contracts with a fully DOT licensed transporter to bring in a 6,000-gallon vacuum tanker truck. Badger Disposal only uses empty tanker trucks for its fuel blending activities. Each tanker is checked upon arrival, and if the tanker contains residue it is sent back. Every tanker driver has a copy of the last hauled manifest with the trailer. Upon arrival at the facility, the waste codes from the last hauled manifest are compared to the waste codes for the containers to be pumped to insure compatibility. Drums are staged for pumping inside of the bermed warehouse area. The vacuum tanker truck loads from Dock#2 located on the southeastern corner of the North Drum Storage Warehouse. The truck trailer is backed over the berm and loaded inside of the North Drum Storage Warehouse .

Upon arrival, the tanker truck will back over to Dock#2 for inspection. In order to comply with NR 664 standards, Badger Disposal has implemented a new inspection procedure: Badger Disposal personnel will inspect the integrity of the truck as well as the condition of the tanker pump, filter, grounding clamps and hoses and complete and sign a Tanker Truck and Loading Area Inspection Log. During this inspection, the warehouse containment integrity is also inspected for leaks, cracks and cleanliness. Once the inspection is completed, the trailer is backed into the warehouse for loading.

Badger Disposal process personnel put on appropriate safety equipment which includes respirators, safety glasses, safety shoes, gloves and tyvek suits during the drum pumping operations.

A grounding cable from the tanker trailer is connected to the warehouse grounding cable. This grounding cable is connected to the lid of the drum to be pumped. A wand is connected to the tanker trailer hose. The bung hole of the drum is opened, the wand is inserted and the drum is vacuumed empty. The bung is put back onto the drum, the grounding cable is removed and the empty drum is moved to a storage trailer where it will be shipped off site for reclamation. All drums are pumped from inside of the bermed warehouse area. A liquid level control on the trailer indicates when the trailer is full. A sample of the tanker material is obtained for quality control

purposes. The tanker trailer is inspected to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking. An outgoing manifest is signed and the tractor trailer leaves Badger Disposal. Fuel blended materials are transported to approved cement kilns who use the material as a secondary fuel source.

Paint cans and pails are also shipped into Badger Disposal in various sized containers such as 30-gallon drums, 55-gallon drums and cubic yard boxes. The cans and pails are emptied into 55-gallon drums. If pumpable, the drums are shipped out in a fuel blend tanker. If not pumpable, they are shipped off-site in drums for fuel blending.

7.8 Storage/Transfer Activities

Not all containers shipped into Badger Disposal are candidates for bulking. Only like materials with identical waste codes are bulked. Any other containers are stored until truck load quantities are accumulated or it is economically feasible to ship the drums off site. Containers are not stored on site for over a period of one year. Containers are shipped off site to a fully licensed TSDF.

7.9 Aerosol Can Puncturing

Aerosol can puncturing takes place in the North Drum Storage Warehouse. Aerosol paint cans are punctured using an aerosol puncturing device with a carbon filter. The puncturing device is secured onto the top of a 55 gallon drum, cans are punctured and the liquid is drained into the 55 gallon drum. Vapors are captured by a carbon filter which is part of the puncturing device. The empty aerosol cans are collected and shipped to a recycling facility. The spent carbon from the puncturing unit is put into the paint drum, the paint drum is then either pumped into a fuel blend tanker or shipped off site for fuel blending.

7.10 Non-Hazardous Waste Operations

Non hazardous waste operations occur at the North Drum Storage Warehouse and the 2009 Lab Pack building. Containers such as 5 gal., 10 gal., 15 gal., 20 gal., 30 gal., 55 gal., drums, 275 gal., totes and cubic yard boxes are received at Dock #1, Dock# 4 and the future Dock# 5.

Targeted non-hazardous waste streams include non-hazardous commercial products and chemicals including:

- Coolants from cars, machines, manufacturing, pumps.
- Cleaning solutions including soaps, surfactant mixtures and detergents.

- Wastewaters including metal salt solutions, neutralization baths, mop waters, rinse waters.
- Organic liquids and/or solids including surfactants, dyes, inks, unwanted or off-spec products and chemicals. All must have a flash point of 140 degrees F or more.
- Inorganic liquids and/or solids including metal salts, by-products, unwanted or off-spec. products and chemicals.
- Paints, paint solids and sludges, both latex and oil based, with flash points greater than 140 degrees F.
- Non-hazardous solids include unwanted chemicals, commercial products, detergents, filter cakes, catalysts, floor sweepings, absorbents and clean-up materials.

Some wastes are stored and shipped off-site when truck load quantities are accumulated in their original containers. Liquid wastewaters, purge waters and coolants are accumulated until there are enough drums to fill a 5,000 gallon tanker. These drums are then pumped into a tanker. Once the tanker is full, a manifest is signed by both Badger Disposal and the transporter and the tanker is shipped off site to a fully licensed TSDF for wastewater treatment.

Oil, oily liquids and combustible liquids are received, stored and transferred in the North Drum Storage Warehouse. Combustible liquids are pumped into fuel blend tankers. Oils and oily waters are accumulated until there are enough drums to pump into a 2,000 gallon tanker. This tanker is loaded inside of the warehouse just as the tankers are for fuel blending. Once the tanker is full, a manifest is signed by Badger Disposal and the transporter, and the tanker is shipped off site to a fully licensed TSDF for oil recovery/reclamation.

When there are enough solid drums to make an economically sized load, an empty roll-off is delivered into the 2009 Lab Pack Building through Dock 4 and containers of non hazardous soils, inks, rags, absorbents, latex paints, plastic or metal are dumped into the roll-off. Once the roll-off is full, the transporter is contacted to pickup the roll-off and an outgoing manifest is completed and signed by both Badger Disposal and the transporter and the roll-off is shipped off site to a fully licensed TSDF.

During all facility operations, warehouse personnel are required to wear appropriate personal protective equipment including safety glasses and/or goggles, protective steel-toed work boots, tyvek suits, protective gloves, air filtering respirators with activated carbon filters as well as air filtering respirators for everyday use.

7.11 Approval Procedure

Badger Disposal currently accepts hazardous and non hazardous wastes in multiple sized containers such as 5 gal., 10 gal., 15 gal., 20 gal., 30 gal., 55 gal., 85 gal. drums, cubic yard boxes, cubic yard bags and 275 gal. totes for transfer and storage as well as lab packing and fuel blending. Each of these operations begins with the completion of a Waste Profile form by a generator or broker with Generator Information, Waste Description, General Characteristics, RCRA information, Viscosity, % water, Total Suspended Solids, pH, BTU's, Flash Point, Halogens, Hazardous Characteristics and other components, Chemical Composition and Metals information. Lab Pack profiles are accompanied by an inventory list of laboratory chemicals packed in each drum. The profile data is reviewed by Badger Disposal's General Manager who determines whether the waste stream or lab pack is acceptable for receipt at Badger Disposal. This is determined by making certain that the lab pack and/or waste stream has waste and waste codes that Badger Disposal is permitted to receive as well as characteristics and composition that will meet outgoing waste stream requirements. Once the profile has been classified as acceptable, an approval letter is sent to the generator. Upon completion of the approval process, the waste is acceptable for shipment into Badger Disposal. Generators are required to resubmit waste identification forms annually.

7.12 Receiving Procedure

Hazardous wastes are received at all three Badger Disposal warehouses, Non-hazardous wastes are received at the North Drum Storage Warehouse and the 2009 Lab Pack Building.

In order to ensure proper waste handling, storage and transfer for ultimate disposal, Badger Disposal follows the procedures specified in the facility Waste analysis Plan located in Appendix D as well as the Solid Waste Analysis Plans submitted to the WIDNR November 30, 1990 and June 20, 2000 . The goals of these Waste Analysis Plans include being able to identify and separate waste types which are incompatible, ensure proper handling procedures are identified for various waste types, and to ensure that all waste types handled are included in the Badger Disposal permit.

Drums and totes are received at Badger Disposal from fully DOT licensed transporters in box van trailers. Upon arrival at Badger Disposal, the truck driver is instructed to back the trailer into Dock #1, Dock#4 or Dock #5 and to bring the manifests/bills of lading and any other paperwork associated with the load to the main office where the Plant Manager and/or General Manager review the paperwork. The manifest/bill of lading wording is validated to ensure that it meets regulatory requirements. At a minimum the following information will be checked on each manifest/bill of lading:

- The generator's name, address, and EPA Identification number if applicable
- Each transporter's name and EPA Identification number
- The designation of the waste shipment (i.e., hazardous waste management facility, address and EPA Identification number)
- Proper DOT shipping name and number
- The quantity or volume of waste in the shipment
- The number and type of container in the shipment
- The EPA waste code number
- A signed, dated certification of the shipment's contents

The driver is instructed to return to his truck. Warehouse personnel make certain that the catchment sump located inside of the warehouse at Dock 1 is turned off and the drums are off loaded. During off-loading, warehouse personnel check to ensure that all labels are consistent with the manifest/bill of lading and verify the number of drums. Any damaged or incomplete label will be immediately rectified. Drums are also checked for integrity at the time of off-loading and any leaking drums are immediately overpacked. Any discrepancy in drum quantities are noted as a discrepancy on the manifest/bill of lading. Containers from each generators waste stream are randomly chosen for sampling and analysis. A 10% composite sample is taken of incoming streams (excluding lab packs, corrosive solids, filter press solids, cyanide solids, toxic solids, organic solids such as rags, contaminated soils and paint cans. Drums are sampled with a coliwasa or equivalent SW-846 method. Once taken, the sample is labeled immediately with the generator name and is taken to the laboratory. The laboratory personnel additionally label the sample with a unique tracking number associated with the manifest for the load. Samples are then analyzed by the on site laboratory. Analysis includes BTU's, Halogens, %water, %solids, pH, specific gravity and flash point. The analysis is matched to the information provided on the waste profile form. If all of the information matches, the load is accepted and the containers are placed into appropriate storage locations in the warehouse. Each drum is labeled with a tag that indicates a drum number, generator name, generator address, waste stream number, DOT shipping name, storage area code, manifest number and date received. This information assists with the tracking of each drum to the ultimate facility. If the information does not match the waste profile form, the generator is contacted and an amended profile is required. Once the containers are off-loaded from the truck, the driver returns to the plant office to receive a signed copy of the manifest/bill of lading. A copy of the manifest/bill of lading is also sent to the generator and the WIDNR as required.

Compatibility of waste materials is also determined at the time of receipt. This determination is based upon the information provided on the profile and incoming manifest. Examples of incompatibles are calcium hypochlorite and sodium nitrate which are oxidizers, calcium carbide which is water reactive, raney nickel which is spontaneously combustible and benzoyl peroxide

which is an organic peroxide. Any of these wastes or any waste determined to be incompatible will be placed on containment pallets and segregated as part of the facility standard operating procedure.

7.13 Rejection Procedure

Upon rejecting a waste or identifying a container residue that exceeds the quantity limits for empty containers, Badger Disposal will consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility Badger Disposal will return the rejected waste to the generator. Badger Disposal will send the waste to the alternative facility or to the generator within 60 days of the rejection or the container residue identification. While making arrangements for forwarding rejected wastes or residues to another facility, Badger Disposal will ensure that either the delivering transporter retains custody of the waste, or will provide for secure temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest. For full or partial load rejections and residues that are to be sent off-site to an alternate facility, Badger Disposal will prepare a new manifest in accordance with s. NR664.020(1) and the following instructions:

- (a) Write the generator's EPAID number in item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.
- (b) Write the name of the alternate designated facility and the facility's EPAID number in the designated facility block (Item 8) of the new manifest.
- (c) Copy the manifest tracking number found in Item 4 of the old manifest to the special handling and additional information block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
- (d) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the discrepancy block of the old manifest (Item 18a).
- (e) Write the DOT description for the rejected load or the residue in Item 9 of the new manifest and write the container types, quantity and volume of waste.
- (f) Sign the generator's or offeror's certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.

- (g) For full load rejections that are made while the transporter remains present at the facility, Badger Disposal will forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the alternate facility space. Badger Disposal will retain a copy of this manifest for its records, and give the remaining copies to the transporter to accompany the shipment. If the original manifest is not used, Badger Disposal will use a new manifest and comply with pars. (a) to (f).

Except as provided in par. (g), for rejected wastes and residues that must be sent back to the generator, Badger Disposal will prepare a new manifest in accordance with s. NR662.020(1) and the following instructions:

- (a) Write the facility's EPAID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.
- (b) Write the name of the initial generator and the generator's EPAID number in the designated facility block (Item 8) of the new manifest.
- (c) Copy the manifest tracking number found in Item 4 of the old manifest to the special handling and additional information block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
- (d) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the discrepancy block of the old manifest (Item 18a).
- (e) Write the DOT description for the rejected load or the residue in Item 9 of the new manifest and write the container types, quantity and volume of waste.
- (f) Sign the generator's or offeror's certification to certify, as offeror of the shipment that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- (g) For full load rejections that are made while the transporter remains at the facility, Badger Disposal may return the shipment to the generator with the original manifest by completing Item 18a and 18b of the manifest and supplying the generator's information in the alternate facility space. Badger Disposal will retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, Badger Disposal will use a new manifest and comply with pars. (a) to (f).

If Badger Disposal rejects a waste or identifies a container residue that exceeds the quantity limits for empty containers set forth in s. NR 661.07(2) after it has signed, dated and returned a copy of the manifest to the delivering transporter or to the generator, Badger Disposal will amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. Badger Disposal will also copy the manifest tracking number from item 4 of the new manifest to the discrepancy space of the amended manifest and will re-sign and date the manifest to certify to the information as amended. Badger Disposal will retain the amended manifest for at least 3 years from the date of amendment and will, within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended. Within 45 days, Badger Disposal will also send one copy of the amended manifest to the department in an electronic format specified by the department.

drums, 30 gallon drums, 55 gallon drums and cubic yard boxes as loose pack waste streams. These containers are then bulked into larger containers such as 55 gallon drums or totes. These loose packs are of like materials with identical waste codes. Badger Disposal does not bulk oxidizers, toxic liquids/solids or poisons. Once bulked the drums and/or totes are either shipped off-site for disposal or if a candidate for fuel blending, pumped into an outgoing fuel blend tanker. After the drums are RCRA emptied, they will be crushed or sent off site for recycling. Empty cubic yard boxes are discarded.

Other materials that are bulked include solid rags and absorbents that are bulked into cubic yard boxes and shipped off site for fuel blending. A liner is placed within the cubic yard box, the emptying of the drums of solids into cubic yard boxes is accomplished by means of a drum tipping unit attached to a fork lift which dumps the materials into the cubic yard box. Only DOT approved shipping containers are utilized for this operation. Only organic solids with little or no volatility and inorganic solids are bulked.

Acids and bases are bulked from 55 gallon drums into totes or a tanker and shipped off site for neutralization and chemical treatment. Lean waters which are flammable streams with low BTU value are also bulked into totes and shipped off site for fuel blending. Transfer of hazardous waste from drums into totes is conducted in a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices of handling flammable, ignitable, explosive, reactive or other hazardous materials. Badger Disposal uses a submerged-fill pipe to load liquids into totes. Batteries and pcb capacitors and ballasts are also bulked from small containers to large containers for more economical disposal options. Paint cans/pails are shipped into Badger Disposal in various sized containers such as 30 gallon drums, 55 gallon drums and cubic yard boxes. The cans and pails are emptied into 55 gallon drums. If pumpable the drums are shipped out in a fuel blend tanker, if not pumpable they are shipped off-site in drums for fuel blending.

Operation and maintenance activities consist of daily logged inspection of all diked areas, drum storage areas and drum processing areas. This inspection is to check for any leaks that may have occurred, spillage, damaged drums and the integrity of the individual containment areas. All warehouse personnel are responsible for maintaining a clean work area. The General Manager will monitor the facility operation for any liner tears in cubic yard boxes, cleanliness and making certain that personnel are utilizing proper safety equipment.

Aerosol Can Puncturing

Aerosol paint cans are punctured using an aerosol puncturing device with a carbon filter. The puncturing device is secured onto the top of a 55 gallon drum, cans are punctured and the liquid

is drained into the 55 gallon drum. Vapors are captured by a carbon filter which is part of the puncturing device. The empty aerosol cans are collected and shipped to Midwest Iron located in Milwaukee, WI for recycling. The spent carbon from the puncturing unit is put into the paint drum, the paint drum is then either pumped into a fuel blend tanker or shipped off site for fuel blending.

Storage/Transfer Activities

Not all containers shipped into Badger Disposal are candidates for bulking. Only like materials with identical waste codes are bulked. Any other drums are stored until truck load quantities are accumulated or it is economically feasible to ship the drums off site, drums are not stored in the warehouse for over a period of one year. Drums are shipped off site to a fully licensed TSDF.

Fuel Blending Activities

On August 23, 1996 Badger Disposal of WI., Inc. (dba EOG Disposal, Inc.) received a Conditional Approval for Legitimate Recycling Exemption – Hazardous Waste Burned for Energy Recovery/Fuel Blending and Marketing Activities. On June 14, 2006 Badger Disposal of WI., Inc. received a notice from the State of WIDNR that the Department was in the process of revising the State's hazardous waste management regulations, to be in effect August 1, 2006. The recycling exemption in ch. NR 625 will no longer exist meaning that commercial fuel blending activities became subject to full hazardous waste treatment facility requirements, including licensing. On July 10, 2006 Badger Disposal applied for a temporary authorization to continue its fuel blending activities, on August 15, 2006 Badger Disposal received a six month temporary authorization to continue its fuel blending activities. On February 6, 2007 another 6-month temporary authorization approval for the fuel blending activities was received from the WIDNR. On July 26, 2007 a Hazardous Waste Treatment-Container Commercial License was issued to Badger Disposal

In order to comply with the new standards Badger Disposal implemented certain procedural changes. Previously fuel blending activities occurred at Dock 1 on the northwestern corner of the existing storage building. This operation was moved to inside of the existing storage building at Dock 2 located on the southeastern corner. The truck trailer is backed over the berm for pumping, the tractor remains outside of the building.

Additional inspection requirements have been implemented that include a more extensive written inspection of the tanker truck and loading area. A new Tanker Truck and Loading Area Inspection Log has been designed and is included in Appendix A of Badger Disposal's Inspection Schedule.

Badger Disposal will include a review of the new NR 664 standards during the next training session as part of item 4 of the Process Personnel Training Program Outline.

The facility Contingency Plan has been revised to include the toll free number for the State of Wisconsin Division of Emergency Government Spill Hotline. Text has changed from "name and address of the incident" to "name and address of Badger Disposal".

The purpose of Badger Disposal's facility is to conduct exempt recycling of hazardous waste materials, including combustible waste, waste oil, paint waste, solvent waste and other organic and inorganic materials. The activities conducted at this facility are based on the re-direction of materials from the waste stream for the purpose of beneficial use whenever possible. The materials received at this facility are primarily generated by commercial, institutional and industrial companies that do not generate bulk quantities. Therefore, the function performed by this facility is primarily the bulking and transfer of hazardous and nonhazardous wastes in order to gain access to secondary markets. Organic materials make up the majority of the materials accepted at Badger Disposal. Some of the organic materials are recycled by Badger Disposal for re-refining or energy recovery as a fuel for industrial furnaces, or some are recycled by a separate off-site licensed facility.

The purpose of Badger Disposal's fuel blending activities is to collect and direct both nonhazardous and hazardous wastes into recycling processes. The first step in our fuel blending process is to determine that a generators waste stream is suitable for fuel blending, this is accomplished by requiring the generator or broker complete a Waste Profile form with Generator Information, Waste Description, General Characteristics, RCRA information, Viscosity, % water, Total Suspended Solids, pH, BTU's, Flash Point, Halogens, Hazardous Characteristics and other components, Chemical Composition and Metals information. The profile data is reviewed by Badger Disposal's General Manager who determines whether the stream is fuel blendable, an example of a candidate stream would be one with a BTU value of >5,000, water content of 0-30% and halogens of 0-20% flash point of <140. Once the profile has been classified as acceptable for the fuels program an approval letter is sent to the generator. Upon completion of the approval process, the waste is shipped to Badger Disposal.

Wastes are received in various container sizes such as 5 gallon pails, 10 gallon pails, 14 gallon drums, 30 gallon drums, 55 gallon drums and 275 gallon totes. Upon receipt at Badger Disposal 10% of each waste stream is sampled and analyzed for BTU's, Halogens, %Water, %Solids and ph and flash point. The analysis is matched to the information provided on the Waste Profile form. If all of the information matches, the drums are moved into appropriate storage locations, if the information does not match the generator is contacted and an amended profile is required.

Once truckload quantities are accumulated, Badger Disposal contracts with a fully DOT licensed transporter to bring in a 6,000 gallon vacuum tanker truck. Badger Disposal only uses empty tanker trucks for its fuel blending activities. Each tanker is checked upon arrival, if the tanker contains residue it is sent back. Every tanker driver has a copy of the last hauled manifest with the trailer, upon arrival at the facility the waste codes from the last hauled manifest are compared to the waste codes for the containers to be pumped to insure compatibility. Drums are staged for pumping inside of the bermed warehouse area. The vacuum tanker truck loads from Dock 2 located on the southeastern corner of the existing storage building. The truck trailer is be backed over the berm and loaded inside of the existing storage building.

Upon arrival, the tanker truck will back over to Dock 2 for inspection. In order to comply with NR 664 standards, Badger Disposal has implemented a new inspection procedure: Badger Disposal personnel will inspect the integrity of the truck as well as the condition of the tanker pump, filter, grounding clamps and hoses and complete and sign a Tanker Truck and Loading Area Inspection Log. During this inspection the warehouse containment integrity is also inspected for leaks, cracks and cleanliness. Once the inspection is completed the trailer is backed into the warehouse for loading.

Badger Disposal process personnel put on appropriate safety equipment which includes respirators, safety glasses, safety shoes, gloves and tyvek suits during the drum pumping operations.

A grounding cable from the tanker trailer is connected to the warehouse grounding cable. This grounding cable is connected to the lid of the drum to be pumped. A wand is connected to the tanker trailer hose. The bung hole of the drum is opened, the wand is inserted and the drum is vacuumed empty. The bung is put back onto the drum, the grounding cable is removed and the empty drum is moved to a storage trailer where it will be shipped off site for reclamation. All drums are pumped from inside of the bermed warehouse area. A liquid level control on the trailer indicates when the trailer is full. A sample of the tanker material is obtained for quality control purposes. The tanker trailer is inspected to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking. An outgoing manifest is signed and the tractor trailer leaves Badger Disposal. Fuel blended materials are transported to approved cement kilns who use the material as a secondary fuel source.

Subchapter B – General Facility Standards

NR 664.0011 Identification Number

The EPA Identification number for Badger Disposal is WID988580056.

NR 664.0012 Required Notices

Badger Disposal does not receive hazardous waste from a foreign source.

NR 664.0013 General Waste Analysis

A copy of Badger Disposal's Waste Analysis Plan is located in Appendix D. The Waste Analysis Plan sets forth the requirements for sampling, testing and evaluating the wastes to ensure that sufficient information is available for safe handling and to provide the means for meeting outbound specifications for waste products.

Before Badger Disposal treats, stores or disposes of any hazardous or nonhazardous wastes, Badger Disposal will obtain a detailed chemical and physical analysis of the waste. The analysis will contain all the information which must be known to treat, store or dispose of the waste.

Section 2 of the Waste Analysis Plan specifically discusses information that Badger Disposal requires from generators to assess a waste's suitability for processing into a waste derived fuel. In order to be useful as a supplied fuel, a material must have sufficient BTU content and be compatible with other types of materials accepted. Halogen content is also a factor in determining the suitability of a waste stream for processing. Each generator or broker must complete a Badger Disposal profile, their own waste identification form, or one of the waste identification forms used by brokers who represent the generator. The Waste Profile form is always completed. The waste identification form will at a minimum contain Generator Information, Waste Description, General Characteristics, RCRA Information, Viscosity, Total Suspended Solids, pH, BTU's, Flash Point, Halogens, Hazardous Characteristics and other components, Chemical Composition and Metals information. This information will assist Badger Disposal in determining if a waste is an acceptable candidate for fuel blending.

Chemical and physical samples are analyzed by a laboratory certified or registered under ch. NR 149, except for field analyses for pH, specific conductance and temperature. Analysis is repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis will be repeated when any of the following occurs:

- Badger Disposal is notified or has reason to believe that the process or operation generating the hazardous or nonhazardous wastes has changed.

Badger Disposal has developed and follows a written waste analysis plan which describes the procedures necessary for Badger Disposal to comply with NR 664.0013 (1) . Badger Disposal keeps this plan at the facility. Badger Disposal will continue to follow the specifications of this

plan upon receipt of a Temporary Authorization for Fuel Blending Activities. The plan specifies all of the following:

- The parameters for which each hazardous or non-hazardous waste will be analyzed and the rationale for the selection of these parameters. A Summary of Analyses performed is located in Table 2 of the existing Waste Analysis Plan, the rationale for the selection of these parameters is located on page 63 of the existing Waste Analysis Plan.
- Test methods which will be used to test for these parameters. Test methods are listed in Section 4 of the existing Waste Analysis Plan.
- The sampling method used to obtain a representative sample of the waste to be analyzed. Sampling methods are listed in Section 7 of the existing Waste Analysis Plan. A minimum 10 percent composite of each generator's waste is sampled with a coliwasa or equivalent SW-846 method.
- The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date. Badger Disposal requires generators to recertify every waste stream on an annual basis. Every waste shipment received from a generator is also analyzed for BTU's/lb. % Chlorine, %Water, pH, Specific Gravity and Compatability. This analysis is then compared to the Waste Profile form to ensure that the material matches the information provided.

NR 664.0014 Security

The Badger Disposal transfer/storage facility property is surrounded by a chain link security fence with three strand of barbed wire on top. The fence is eight feet high overall. Warning signs reading: "DANGER UNAUTHORIZED PERSONNEL KEEP OUT" are posted at each entrance to the active portion of the facility and at other locations, in sufficient numbers to be seen from any approach to the active portion. The legend is legible from a distance of 25 feet. An electronic access gate is continually monitored for entrance of unauthorized personnel. All gates are kept closed and locked during non-operating hours of the facility. Gates are kept closed during receiving hours and monitored for incoming trucks and visitors by Badger Disposal Personnel. During fuel blending operations the gates are kept closed. A gear driven operator with intercom mounted to the gate post has been installed on the main gate. Service doors to the active portion of the facility are kept locked at all times. During operating hours, all persons entering the facility are required to enter the office building and state their business to the receptionist and sign a visitor's log. In the case of waste or materials delivery trucks, the delivery will be accepted (or tentatively accepted in the case of waste deliveries) prior to being directed and/or escorted through the facility. All non complying entrants are treated as unauthorized entrants and are asked to leave the facility. Unauthorized entrants are detected by facility personnel. During non operating hours, the fence and locked gates control unauthorized entry to the facility.

Access is controlled through the warehouse and is limited to employees and escorted visitors. There is an internal alarm system throughout the facility and office that is monitored 24 hours a day. Badger Disposal is equipped with an internal communications system capable of providing immediate notification to facility personnel of any unauthorized access, there are 2-way radios and emergency telephones in the facility capable of summoning emergency agencies including fire and police departments.

NR 664.0015 General Inspection Requirements

A copy of Badger Disposal's Inspection Schedule is located in Appendix E. This schedule describes the personnel, organization and management policies and procedures for Badger Disposal's facility. The purpose of this schedule is to minimize the possibility of an accidental release of materials which may cause or lead to, a discharge of hazardous materials to the environment or cause a threat to human health by maintaining the plant and equipment in good working order and providing a written base of experience for future refinement of waste storage activities.

Inspection procedures are used to ensure that equipment and operational areas will not fail so as to endanger public health or the environment. Inspections are conducted on a regular schedule to minimize any such risk. Badger Disposal's Inspection Schedule is based on the specific flow of the various processes. Areas covered for current operations include the following:

- Safety Equipment
- Emergency Equipment
- Security and Communication Equipment
- Loading/Unloading Areas
- Container Management Areas
- Storage and Process Areas.

Badger Disposal inspects the facility for malfunctions and deterioration, operator errors and discharges which may be causing, or may lead to, release of hazardous waste constituents to the environment or a threat to human health. Badger Disposal conducts these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

Badger Disposal has developed and follows a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices and operating and structural equipment that are important to preventing, detecting or responding to environmental or human health hazards. This schedule is kept at the Badger Disposal facility. The Inspection Schedule identifies the types of problems which are to be looked for during the inspection.

The frequency of inspections are based on the rate of deterioration of the equipment utilized and the probability of an environmental or human health incident if the deterioration, malfunction or any operator error goes undetected between inspections. Areas subject to spills are inspected daily.

Badger Disposal will remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action will be taken immediately.

Badger Disposal records inspections in an inspection log and keeps these records for at least 3 years from the date of the inspection. These records include:

- The date and time of inspection
- The name of the inspector
- A notation of the observations made and the date and nature of any repairs or other remedial actions.

The Inspection log identifies the following:

- Equipment or area to be inspected
- Observations or checks which should be conducted
- Date and time of the inspection
- Name of the inspector
- Notations of any observations made

Table 3-1 in the Inspection Schedule summarizes the area/equipment needing to be inspected as well as the items to check, type of concerns and minimum frequency for inspections. Inspection logs located in Appendix A of the Inspection Schedule are used to identify and record discrepancies found on any pieces of critical equipment within the facility for which failure could lead to the endangerment of public health or to the surrounding environment.

Prior to beginning fuel blending operations the integrity of the tanker truck is inspected as well as the condition of the tanker pump, filter, grounding clamps and hoses. During the transfer of waste, hoses, grounding clamps, the filter and the pump are monitored by personnel to ensure that all of the equipment is functioning properly. After the tanker truck is filled a visual inspection of the truck is taken to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking. A Tanker Truck and Loading Area Inspection Log is located in Appendix A of the facility Inspection Logs. This log will be

completed for every outgoing fuel blending shipment. Logs are maintained at the facility for a period of at least three years.

NR 664.0016 Personnel Training

A copy of Badger Disposal's Personnel Training Program is located in Appendix F. The purpose of this Training Program is to prevent personal injury, property damage and environmental degradation arising from the release of hazardous waste into the environment. Badger Disposal's Personnel Training Program is designed to ensure that facility Personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems.

All facility personnel will successfully complete a classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures Badger Disposal's compliance with the requirements of NR 664.0016. Badger Disposal ensures that this training program includes all of the elements described in the document required under sub. (4)(c).

Badger Disposal's training program is directed by a person trained in hazardous waste management procedures, and includes instructions which teach facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

The training program is designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including:

- Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment.
- Response to fires or explosions.
- Shutdown of operations.

Training at Badger Disposal is an ongoing process. This training program has been established to make facility employees aware of the hazards in the work place, and how to conduct work in a safe manner.

All facility personnel are required to successfully complete the training program within 6 months after the date of their employment. No employee is allowed to perform unsupervised work at Badger Disposal until they have successfully completed the training program. All facility personnel are required to participate in the annual training program review to maintain

proficiency, to learn new techniques and procedures, to become familiar with new regulatory requirements, and to reinforce safety and quality consciousness.

Review of Fuel Blending operational procedures is an integral part of the facility annual training program. Appendix C of the Personnel Training Program contains a Process Personnel Training Program Outline. Fuel Blending procedures are reviewed under item number 5 – Facility Operation. Items reviewed include proper protective clothing and equipment necessary during fuel blending operations, proper drum staging, drum handling, drum opening, pumping and closing procedures, proper operation of forklifts, proper operation of tanker truck hose and wand, tanker truck inspections prior to filling and after filling. Also reviewed during this training is preventative maintenance of equipment used in the fuel blending operations and shutdown procedures.

The NR 664 standards will be reviewed during the next training session as part of item 4 of the Process Personnel Training Program Outline.

NR 664.0017 General requirements for ignitable, reactive or incompatible wastes

Containers holding reactive and incompatible wastes are stored in the warehouse building in a storage location that is located 50 feet from the property line. The tanker truck used for fuel blending operations will be located at least 50 feet from the property line. Badger will take precautions to prevent the ignition of ignitable or reactive wastes. These procedures include the segregation of incompatible materials and separation of materials from ignition sources such as open flames, hot surfaces, friction heat, sparks (static, electrical or mechanical), spontaneous ignition and radiant heat. To prevent sources of external ignition, explosion proof electrical equipment will be used in all ignitable storage areas. Badger Disposal does not mix incompatible wastes. It is Badger's policy not to allow smoking except in designated non-operational areas such as office areas. Badger has "No Smoking" signs in highly visible areas of the facility and main entrances.

Badger Disposal will take precautions to prevent reactions which do any of the following:

- Generate extreme heat or pressure, fire or explosions or violent reactions.
- Produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health or environment.
- Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions.
- Damage the structural integrity of the facility.
- Through other like means threaten human health or the environment.

NR 664.0018 Location Standards

The Badger Disposal facility is not located in a floodplain, a wetland or critical habitat. Noncontainerized or bulk liquid hazardous waste will not be placed in any salt dome formation, salt bed formation, underground mine or cave.

NR 664.0019 Construction Quality Assurance Program

Badger Disposal does not have a surface impoundment, waste pile or landfill.

NR 664.0025 Construction Certification for a New Facility

Badger Disposal is an existing facility, not newly constructed.

Subchapter C – Preparedness and Prevention

NR 664.0031 Design and Operation of Facility

Badger Disposal is designed, constructed, maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment.

NR 664.0032 Required Equipment

Badger Disposal is equipped with all of the following

- Internal communications and alarm system capable of providing immediate emergency instruction to facility personnel.
- Hand held 2-way radios capable of summoning emergency assistance from local police departments, fire departments and state/local emergency response teams.
- Portable fire extinguishers, an AFFF foam extinguishing system, spill control equipment and decontamination equipment
- Water that is at adequate volume and pressure to supply water hose streams, foam equipment, sprinklers or water spray systems.

NR 664.0033 Testing and Maintenance of Equipment

All facility communications and alarm systems, fire protection equipment, spill control equipment and decontamination equipment are tested and maintained as necessary to assure its proper operation in time of emergency.

NR 664.0034 Access to Communications or Alarm System

Whenever hazardous waste is being handled, all personnel involved in the operation will have immediate access to the internal alarm and emergency communication devices both directly and through visual/voice contact with another employee.

All employees have immediate access to telephones capable of summoning external emergency assistance.

NR 664.0035 Required Aisle Space

Badger Disposal maintains 3 foot aisle spacing which allows the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency.

NR 664.0037 Arrangements with Local Authorities

Badger Disposal has made arrangements to familiarize police, fire departments, emergency response teams and the local hospital with the layout of the facility, properties of hazardous waste handled at the facility and its associated hazards, places where facility personnel would normally be working, entrances to and evacuation routes. The local hospital, fire department and police department have received copies of Badger Disposal's Contingency Plan and receive updates to the plan anytime the plan changes.

Subchapter D – Contingency Plan and Emergency Procedures

A copy of Badger Disposal's Contingency Plan for current operations is located in Attachment A of this section. The elements of this Contingency Plan are followed during fuel blending operations.

NR 664.0051 Purpose and implementation of contingency plan

Badger Disposal has a contingency plan for its facility. This plan has been designed to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or

non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water

Provisions of this plan are carried out immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

NR 664.0052 Content of contingency plan

Section 4 of the Contingency Plan describes the actions facility personnel will take to comply with ss. NR 664.0051 and 664.0056 in response to fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water at Badger Disposal. Section 3, 3.4 of the Contingency Plan describes arrangements agreed to by local police departments, fire departments, hospitals, contractors and state and local emergency response teams to coordinate emergency services.

Table 2 of the Contingency Plan lists names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator, this list is kept up to date. A primary emergency coordinator and other personnel are listed in the order in which they will assume responsibility as alternatives.

Section 5 of the Contingency Plan includes a list of all emergency equipment at the facility and where this equipment is required. This list is kept up to date. Table 6 of the Contingency Plan also includes the location and a physical description of each item on the list, and an outline of its capabilities.

Section 6 of the Contingency Plan includes an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. A general site evacuation will be announced by activating the alarm system (i.e., air horn). Figure 1 of the Contingency Plan shows the evacuation routes that employees are required to utilize.

NR 664.0053 Copies of contingency plan

A copy of the Contingency Plan and all revisions is maintained at Badger Disposal. Copies are also submitted to all local police departments, hospitals and state and local emergency response teams that may be called upon to provide emergency services.

NR 664.0054 Amendment of contingency plan

The Contingency Plan is reviewed and immediately amended whenever any of the following occurs:

- The facility license is revised.
- The plan fails in an emergency.
- The Badger Disposal facility changes in its design, construction, operation, maintenance or other circumstances in a way that materially increases the potential for fires, explosions or releases of hazardous waste or hazardous waste constituents or changes the response necessary in an emergency.
- The list of emergency coordinators changes.
- The list of emergency equipment changes.

NR 664.0055 Emergency coordinator

At all times, there is at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures. This emergency coordinator is thoroughly familiar with all aspects of Badger Disposal's Contingency Plan, all operations and activities at Badger Disposal, the location and characteristics of waste handled, the location of all records within the facility and the facility layout. This person has the authority to commit the resources needed to carry out the Contingency Plan.

NR 664.0056 Emergency procedures

Whenever there is an imminent or actual emergency situation, the emergency coordinator or a designee when the emergency coordinator is on call, will immediately do all of the following:

- Activate the internal Badger Disposal alarms or communication systems, where applicable to notify all facility personnel.
- Notify appropriate state or local agencies with designated response roles if their help is needed.
- Whenever there is a release, fire or explosion, the emergency coordinator will immediately identify the character, exact source, amount and areal extent of any released materials. This may be done by observation or review of facility records or manifests and, if necessary, by chemical analysis.
- Concurrently, the emergency coordinator will assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment will consider both direct and indirect effects of the release, fire or explosion. The effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any

hazardous surface water run-off from waster or chemical agents used to control fire and heat-induced explosions.

If the emergency coordinator determines that Badger Disposal has had a release, fire or explosion which could threaten human health, or the environment, outside the facility, that person will report the findings according to all of the following:

- If the emergency coordinator's assessment indicates that evacuation of local areas may be advisable, the emergency coordinator will immediately notify appropriate local authorities. The emergency coordinator will be available to help appropriate local officials decide whether local areas should be evacuated.
- The emergency coordinator will immediately notify national response center at 800-424-8802 and the division of emergency government at 800-943-0003. The report will include all of the following:
 - Name and telephone number of the reporter.
 - Name and address of the facility.
 - Time and type of incident.
 - Name and quantity of material involved, to the extent known.
 - The extent of injuries, if any.
 - The possible hazards to human health, or the environment, outside the facility

During an emergency, the emergency coordinator will take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur or spread to other hazardous waste at Badger Disposal. These measures will include, where applicable, stopping processes and operations, collecting and containing released waste and removing or isolating containers.

If Badger Disposal stops operations in response to a fire, explosion or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate.

Immediately after an emergency, the emergency coordinator will provide for treating, storing or disposing of recovered waste, contaminated soil or surface water or any other material that results from a release, fire or explosion at the facility.

Subchapter E – Manifest System

NR 664.0071 Use of Manifest System

Upon receipt of hazardous waste accompanied by a manifest or bill of lading Badger Disposal will:

- Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest or bill of lading was received.
- Not any significant discrepancies in the manifest or bill of lading on each copy of the manifest.
- Immediately give the transporter at least one copy of the signed manifest or bill of lading.
- Within 30 days after the delivery will send one copy of the manifest to the generator, send one copy of the manifest to the department.
- Retain at Badger Disposal a copy of each manifest and bill of lading for at least 3 years from the date of delivery.
- Pay a manifest fee for each manifest submitted.

Whenever a shipment of hazardous waste is initiated from Badger Disposal, the facility will comply with the requirements of ch. NR 662.

NR 664.0072 Manifest Discrepancies

Upon discovering a significant discrepancy Badger Disposal will attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved with 15 days after receiving the waste, Badger Disposal will immediately submit to the department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

NR 664.0073 Operating Record

Badger Disposal will keep a written operating record at the facility. All of the following information will be recorded as it become available and maintained in the operating record until closure of the facility:

- A description and the quantity of each hazardous waste received, the methods and dates of its treatment, storage or disposal at Badger Disposal.
- The location of each hazardous waste within the facility and the quantities at each location cross referenced to specific manifest document numbers.
- Records and results of waste analyses and waste determinations performed.

- Summary reports and details of all incidents that require implementing the contingency plan.
- Records and results of inspections (for 3 years)
- Monitoring, testing or analytical data and corrective actions.
- All closure cost estimates.
- A certification annually that Badger Disposal has a program in place to reduce the volume and toxicity of hazardous waste generated at the facility to the degree determined by Badger Disposal to be economically practicable, and that the method of treatment, storage or disposal is that practicable method currently available to Badger Disposal which minimizes the present and future threat to human health and the environment.
- Record of the quantities and date of placement for each shipment of hazardous waste placed in land disposal units.
- For an off-site treatment facility, a copy of the notice required by the generator or the owner or operator.
- For an off-site treatment facility, the information contained in the notice required by the generator or owner or operator.
- For an off-site land disposal facility, a copy of the notice required by the generator or the owner or operator of a treatment facility.
- For an off-site storage facility, a copy of the notice required by the generator or the owner or operator.
- For an on site storage facility, the information contained in the notice required by the generator or the owner or operator.
- Any records required under s. NR 664.0001(10)(m).

NR 664.0074 Availability, Retention and Disposition of Records

All records, including plans, will be furnished upon request and made available at all reasonable times for inspection by any officer, employee or representative of the department. A copy of records of waste disposal locations and quantities will be Submitted to the department and local land authority upon closure of Badger Disposal.

NR 664.0075 Annual Report

Badger Disposal will prepare and submit an annual report to the department by March 1 of every year. The annual report will cover facility activities during the previous calendar year and will at a minimum, include the following:

- The EPA identification number, name and address of Badger Disposal.
- The calendar year covered by the report.

- For off-site facilities, the EPAID number of each hazardous waste generator from which Badger Disposal received a hazardous waste during the year.
- A description and the quantity of each hazardous waste received during the year. For off-site facilities, this information will be listed by EPAID number of each generator.
- The method of treatment, storage or disposal for each hazardous waste.
- The most recent closure cost estimate.
- A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.
- A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent the information is available for the years prior to 1984.
- The certification signed by the owner of Badger Disposal or an authorized representative.

NR 664.0076 Unmanifested Waste Report

Badger Disposal does not accept any hazardous waste from an off-site source unless accompanied by appropriate shipping papers.

NR 664.0077 Additional Reports

In addition to submitting the annual reports, Badger Disposal will also report all of the following to the department:

- Releases, fires and explosions.
- Facility closures.
- Other information as required by subchs. F, K to N, AA, BB and CC.

Subchapter F-Releases From Solid Waste Management Units

Because of the engineered secondary containment around storage and processing areas in the facility, the chance of an accidental leak or spill that could escape from the site and enter surface or groundwater is negligible. Such a release incident has not occurred during the history of the existing facility. In order to prevent contamination of groundwater, Badger Disposal utilizes primary, secondary and tertiary containment for all operations. In addition, Badger Disposal has several policies in place to further prevent groundwater impacts. These policies include runoff prevention, emergency spill procedures and precipitation management policies. Area water supply wells draw groundwater from the sandstone and Niagara dolomite aquifers. The sandstone aquifer is most frequently used in the area and is overlain by Maquoketa Shale which acts as a confining layer. The Niagara aquifer is overlain by 50 to 100 feet of glacial till (mainly clay). Thus, in the unlikely event of a spill or release escaping the containment structures, potential for contamination of groundwater resources would be minimal.

Subchapter G – Closure and Long-Term Care

A copy of Badger Disposal's Closure Plan is located in Appendix J. A Closure Cost Estimate - Table 1 for current operations is located in Attachment D of this section.

NR 664.0111 Closure performance standard

Badger Disposal will close its facility in a manner that does all of the following:

- Minimizes the need for further maintenance.
- Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition products to the ground or surface waters or to the atmosphere.
- Complies with the closure requirements NR 664 subchapter G including, but not limited to, the requirements of ss. NR 664.0178, 664.0197, 664.0228, 664.0258, 664.0310, 664.0351, 664.0601 to 664.0603 and 664.1102.

NR 664.0112 Closure plan; amendment of plan

Badger Disposal has a written closure plan. Badger Disposal has expected life of 50 years. The entire facility will operate until closure. Therefore, not partial closure is anticipated. This plan identifies steps necessary to perform final closure of Badger Disposal at any point in its active life. The Closure Plan includes:

- A description of how each hazardous waste management unit will be closed.
- A description of how final closure of the facility will be conducted. This description identifies the maximum extent of the operations which will be unclosed during the active life of the facility.
- An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during final closure including methods for removing, transporting, treating, storing or disposing of all hazardous wastes, and identification of the types of off-site hazardous waste management units to be used.
- A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures and soils during partial and final closure, including procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils and

criteria for determining the extent of decontamination required to satisfy the closure performance standard.

- A detailed description of any other activities necessary during the closure period to ensure that final closure satisfies the closure performance standards including groundwater monitoring, leachate collection and run-on and run-off control.
- A schedule for final closure of the facility. The schedule includes the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure.

Badger Disposal will submit a written notification of or request for an operating license modification to authorize any changes in operating plans, facility design or the approved closure plan. The written notification or request will include a copy of the amended closure plan for review or approval. This notification or request will be submitted at least 60 days prior to the proposed change or no later than 60 days after an unexpected event has occurred which has affected the Closure Plan.

Badger Disposal will notify the department in writing of the intent to close the facility at least 180 days prior to its final closure. The date when Badger Disposal “expects to begin closure” will be no later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes.

NR 664.0113 Closure; time allowed for closure

Within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, or the final volume of non-hazardous wastes Badger Disposal will remove from the facility all hazardous wastes in accordance with the approved closure plan.

NR 664.0114 Disposal or decontamination of equipment, structures and soils

During the final closure periods, all contaminated equipment, structures and soils will be properly disposed of or decontaminated. Badger Disposal will handle all of the waste generated during closure in accordance with all applicable requirements of ch. NR 662.

NR 664.0115 Certification of closure:

Within 60 days of completion of final closure Badger Disposal will submit to the department, by registered mail, a certification that the facility has been closed in accordance with the specifications in the approved Closure Plan. The certification will be signed by the owner and

by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification will be furnished to the department upon request.

Subchapter H – Financial Requirements

A copy of the letter of credit covering closure costs for Badger Disposal is located in Appendix J.

Subchapter I – Containers

NR 664.0171 Condition of Containers

If a container holding hazardous waste is not in good condition or if it begins to leak, Badger Disposal will transfer the waste from its original container to a container that is in good condition. If a leak develops in the tanker truck during fuel blending operations the waste will be transferred into 55 gallon drums and/or totes. Depending upon the circumstances, Badger Disposal will use new containers or transfer the waste back into the containers from which it was pumped. Badger Disposal maintains a sufficient supply of 55 gallon drums and totes at all times. There are no circumstances under which Badger Disposal will directly transfer the waste from on tanker truck to another tanker truck.

NR 664.0172 Compatibility of Waste with Containers

Badger Disposal will use containers made of or lined with materials which will not react with and are otherwise compatible with the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

NR 664.0173 Management of Containers

A container holding hazardous waste will always be closed during storage, except when it is necessary to add or remove waste. A container holding hazardous waste will not be opened, handled or stored in a manner which will rupture the container or cause it to leak.

NR 664.0174 Inspections

At least weekly, Badger Disposal will inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

Prior to beginning fuel blending operations the integrity of the tanker truck is inspected as well as the condition of the tanker pump, filter, grounding clamps and hoses. During the transfer of

waste, hoses, grounding clamps, the filter and the pump are monitored by personnel to ensure that all of the equipment is functioning properly. After the tanker truck is filled a visual inspection of the truck is taken to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking.

NR 664.0175 Containment

(1) Container storage areas have a containment system that is designed and operated in accordance with sub. (2), except as otherwise provided by sub. (3).

(2) A containment system has been designed and is operated to meet all of the following requirements:

- A base underlies the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed.
- Containers are stored on pallets to protect them contact with accumulated liquids.
- The containment system has sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.
- Run-on into the containment system is prevented since the entire warehouse is bermed.
- Hazardous waste liquids are stored on containment pallets

During fuel blending operations, a 6,000 gallon tanker trailer is backed into the warehouse for loading. The containment capacity for the existing process/storage building is 11,379 gallons therefore providing sufficient containment for the volume of the largest container which would be the tanker trailer. During bulking activities in the warehouse addition, a 6,000 gallon tanker trailer is backed into the warehouse for loading in Section B. The containment capacity for this section of the addition is 6,000 gallons, therefore providing sufficient containment for the volume of the largest container which would be the tanker trailer.

NR 664.0176 Special Requirements for Ignitable or Reactive Waste

Containers holding ignitable or reactive waste will be located at least 50 feet from Badger Disposal's property line.

NR 664.0177 Special requirements for incompatible wastes

Incompatible wastes, or incompatible wastes and materials will not be placed in the same container. Hazardous waste will not be placed in an unwashed container that previously held an incompatible waste or material. A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers will be separated from the other material or protected from them by means of a dike, berm, wall or other device.

NR 664.0178 Closure

At closure, all hazardous waste and hazardous waste residues will be removed from the containment system. Remaining containers, liners, bases and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed.

NR 664.0179 Air emission standards

Badger Disposal will manage all hazardous waste placed in a container in accordance with the applicable requirements of subchs. AA, BB and CC.

Subchapter CC

Air Emission Standards for Tanks, Surface Impoundments and Containers

NR 664.1086 Standards: containers

Drums of hazardous waste that are received at Badger Disposal meet the applicable U.S. department of transportation regulations on packaging hazardous material for transportation. All containers are equipped with a cover and closure device that forms a continuous barrier over the container opening such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps or other open spaces into the interior of the containers. The containers are covered at all times when they are in storage. Sampling of containers and removal of container contents occurs through the bore holes on the drum lid.

Containers, their covers and closure devices are visually inspected to check for visible cracks, holes, gaps or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. Container visual inspections occur on or before the date that the container is accepted at Badger Disposal.

When a defect is detected for a container, cover or closure device, Badger Disposal will overpack the drum immediately. If a leak develops in the tanker truck during fuel blending operations the waste will be transferred into 55 gallon drums and/or totes. Depending upon the circumstances, Badger Disposal will use new containers or transfer the waste back into the containers from which it was pumped. Badger Disposal maintains a sufficient supply of 55 gallon drums and totes at all times. There are no circumstances under which Badger Disposal will directly transfer the waste from on tanker truck to another tanker truck.

Written records of inspections which include procedures regarding containers that do not meet applicable U.S. DOT regulations are maintained at Badger Disposal. A copy of Badger Disposal's Inspection Schedule is located in Appendix E.

NR 640.06(3) Treatment Facilities

Fuel blending is the only type of treatment done at Badger Disposal. Engineering plans and plan sheets for the existing site and facility are located in Appendix P and Q of this submittal. Attachment B of Section 7 contains new drawings for current operations.

Badger Disposal follows a written Waste Analysis Plan which is located in Appendix D of this submittal. Badger Disposal will have emergency storage capacity in the event of an equipment breakdown. Where hazardous waste is continuously fed into a treatment process or equipment, the process or equipment will be equipped with an automatic waste feed cutoff or a by-pass system which is activated when a malfunction in the treatment process occurs.

All residues or by-products from a treatment process will be analyzed to determine whether they are a hazardous waste as identified in ch. NR 605 or they will be assumed to be hazardous waste. Unloading of hazardous waste will take place only in approved designated areas. If for any reason, Badger Disposal is rendered inoperable or is not able to completely process the hazardous waste, an approved alternative method will be used for hazardous waste treatment or disposal. Chemical, physical or biological treatment of hazardous waste will comply with the general requirements for ignitable, reactive or incompatible wastes in s.NR630.17(2). Incompatible wastes will not be placed in the same process or equipment used for chemical, physical or biological treatment.

Ignitable or reactive waste will not be placed in a process or equipment used to chemically, physically or biologically treat a hazardous waste unless:

- a. The waste is treated, rendered or mixed before or immediately after placement in the process or equipment so that the resulting mixture or dissolution of the material no

longer meets the criteria of ignitable or reactive waste in ss. NR 605.08(2) or (4) and 630.17(2) is complied with, or;

- b. The waste is treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react.

Badger Disposal's Operation and Maintenance manual is located in Appendix K of this submittal.

Records of operating conditions will be retained as specified in s. NR 630.31.

Badger Disposal's Closure Plan is located in Appendix J of this submittal.

ATTACHMENT B
CURRENT FACILITY OPERATION DRAWINGS

Revised November 20, 2009

Current Operations Drawing #5490-OV1- Revision 2, dated 7/31/09

Current Operations Drawing #5490-D1

Current Operations Drawing #05490-D2 – New – 2009 Lab Pack Building Drum Storage Plan – Revision 2, dated 6/1/09

Current Operations Traffic Pattern Plan Drawing #05490-T1- Revision 2, dated 7/31/09

Current Operations Security Plan Drawing #05490-SY1-Revision 2, dated 7/31/09

Current Operations Emergency Equipment Layout Drawing #05490-EE1

Current Operations Emergency Equipment Layout Drawing #05490-EE2-New – Revision 2 – dated 6/1/09

2007 Warehouse Addition:

A-0.1 Title Sheet

A-1.0 Site Plan

A-1.1 Site Grading Plan/Erosion Control Plan

S-1.0 Foundation Plan

S-1.1 Foundation Details

S-1.2 Foundation Details

S-1.3 Foundation Details

S-2.0 Roof Framing Plan

S-2.1 Roof Framing Details

S-2.2 Door Opening Details

A-3.0 Floor Plan

A-4.0 Elevations

FP-1 Fire Sprinkler Plan

H-1 HVAC Plan

2009 Lab Pack Building:

Certified Survey Map No. 8176

A-0.1 Title Sheet

A-1.0 Existing Site Plan

A-2.0 North Elevation

A-3.0 Floor, Foundation, Framing Plan

A-3.1 Master Floor Plan

A-3.2 Pump Room Details

A-3.3 Traffic Flow Plan

S-1.1 Structural Notes and Schedules

S-3.0 Foundation Details

S-3.1 Foundation Details

S-4.0 Roof Framing Details

FP1 Fire Sprinkler Plan

HV-1 HVAC Plans

